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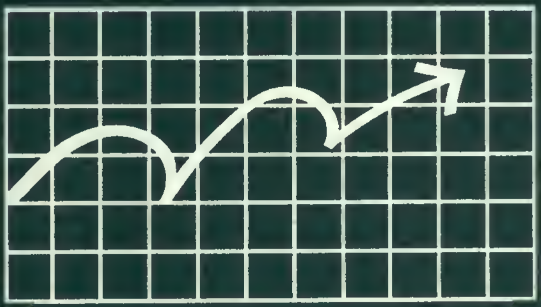

ECONOMIC CONDITIONS IN MONTANA

1986

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ECONOMIC CONDITIONS IN MONTANA, 1986

Submitted to:

The Honorable Ted Schwinden
Governor of Montana

Edited by:

Phil Brooks, State Economist
Office of Economic Analysis
Montana Department of Commerce

December 1986

[redacted]

DEPARTMENT OF COMMERCE

TED SCHWINDEN, GOVERNOR
1424 9TH AVENUE
STATE OF MONTANA
(406) 444-3494
HELENA, MONTANA 59620-0401

The Honorable Ted Schwinden, Governor of Montana, and
Members of the 50th Legislature

Dear Governor Schwinden and Members of the Montana House and Senate:

I present to you the Economic Conditions in Montana, 1986 report. It represents an up-to-date analysis of Montana's economy including the regional economies within the state. The report also contains a discussion of recent changes in the industrial and occupational structure of the Montana economy, along with the effect of these changes on worker earnings. In addition, an executive summary is included for your convenience.

This report is sponsored by the Governor's Council on Economic Development, and emerges from Executive Order No. 15-83 creating the Council. The section of the Executive Order which pertains to this document reads:

> . . . the Council will assist in the preparation of materials on economic development issues, will prepare a biennial economic development and economic conditions report; and will sponsor appropriate research and other functions important to Montana's efforts in the areas of economic development . . .

I believe this Economic Conditions in Montana, 1986 report will provide valuable information and insight on Montana's economy for both public and private decision makers.

Sincerely,

W.E. "Buster" Schreiber, Chair
Governor's Council on
Economic Development

"AN EQUAL OPPORTUNITY EMPLOYER"

publications & graphics

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EXECUTIVE SUMMARY

This report on economic conditions was prepared to provide decision makers with a review of the state's economic circumstances and to make available detailed data and analysis for those seeking a more in-depth understanding of the economic situation in Montana. The report is intended as a tool for policy formation but is necessarily limited in scope and should not be construed as an attempt to explain all of the many aspects of Montana's diverse and complex economy.

The first of the three chapters presents an overview of the state's economy including a discussion of economic history from the 1970s through the first six months of 1986 and projections through 1989.

The '70s were a time of dramatic economic growth in Montana during which the state outdistanced the national economy and proved much less sensitive to the periodic recessions experienced across the United States. The greatest employment and income increases during this period were in service-producing industries such as health services, business and professional services, public services, retail trade, wholesale trade, and transportation services. Additionally, property income (dividends, interest, and rent) in Montana was one of the most notable areas of increase during the period. Growth also occurred in goods-producing industries such as mining, construction, and manufacturing. However, declines were experienced in agriculture and metal mining, occurrences which foreshadowed deeper economic trouble for those sectors in the following period.

Erratic growth in Montana and the nation characterized the first half of the 1980s. Economic growth was interrupted by two national recessions from which the national economy fully recovered each time. The recessions had a deeper effect on Montana, however, and the state was unable to fully recover. In 1985, the state experienced another recession while the national economy was experiencing slow growth. Montana's difficulties over the period are evidenced by employment growth of 3 percent compared to the national figure of 11 percent and inflation adjusted non-agricultural earnings of a negative 6.5 percent in Montana compared with a 10 percent increase nationwide.

The first six months of 1986 was a period of slow growth in Montana and the U.S. as evidenced by a total personal income annual growth rate of 2.7 percent for Montana and 3 percent for the nation. In Montana, private services showed the strongest growth over the period with other gains registered in lodging and recreation services, metal mining, food processing, and fabricated textile products. Declines were apparent in wholesale and retail trade, oil and gas extraction, building construction, communications, and electrical machinery manufacturing.

The report includes forecasting information from several sources utilizing various measures of economic activity and presents only a very general indication of things to come.

Through 1987, the state should experience slow growth in the areas of income and earnings at rates below the national average. Declines may continue in the narrow category of wage and salary employment. Potentially positive trends in self-employment are not measurable within the scope of the projections used. For 1988 and 1989, more optimism is apparent in the limited available forecasts with modest gains predicted in personal income, non-farm earnings, and wage and salary employment.

The second chapter of the report deals with economic and demographic conditions in Montana described for 12 geographically separated regions. The chapter includes analyses of regional population, labor force, sources of income, and basic industry activity. A map outlining regional boundaries can be found at the beginning of the chapter.

The Anaconda-Butte region peaked in population in 1920 and has been declining since, probably because of increased international competition facing the local mining industry. Still, the region maintains significant transportation advantages due to the confluence of two interstate highways and two major rail lines, and has higher education facilities (the Montana College of Mineral Science and Technology in Butte and Western Montana College in Dillon). The region currently has mining operations in place, plus potential for more mineral development, and has significant recreational resources.

The Billings region was at its historical population peak in 1985 and is the largest population center in the state. As a Great Plains agricultural, natural resources, transportation, and trade and service center, it contains possibly the most diversified economy of the state's regions. An additional positive factor is the location of Eastern Montana College in Billings.

The Bozeman region is smaller than the previous two in population but, like the Billings region, has been characterized by population growth and has as one of its main resources Montana State University. Among the basic industries, government is followed by agriculture and manufacturing in the number of people employed. The Bozeman region also has important tourist and recreational attributes, including its location adjacent to Yellowstone National Park, that contribute to its regional economy.

The Glasgow-Wolf Point region enjoyed a relatively stable population through 1960 but has since scaled back significantly to its current level. The main basic industry has been agriculture with the exception of a short-lived military base. The comparative advantage of the Glasgow-Wolf Point region will probably remain in grain and other agricultural commodities and, at times when the price is right, oil and gas. There is also some manufacturing based on local businesses' ability to take advantage of markets for specialized products.

The Glendive-Sidney region, though smaller in population historically, has some commonalities with the Glasgow-Wolf Point region in population trends and economic change. It is a northern Great Plains agricultural area and has a large oil and gas sector that provided more jobs to this region than any other in Montana.

The Great Falls region, which is currently the second most populated in the state, was a relatively high growth region until 1960. Since then it has remained relatively stable in population. Basic jobs in the Great Falls region declined substantially between 1979 and 1985 (nearly 20 percent, second only to the Butte-Anaconda region). In 1985, government, depending heavily on federal military employment at Malmstrom Air Force Base, was the largest basic industry with agriculture, services, manufacturing, and mining rounding out the top five.

The Havre region has had a comparatively stable population since 1920, has the second smallest regional population, and is primarily agricultural in its economic makeup. Since a 1979 peak in employment, significant basic industry declines have been apparent in railroads and the manufacturing of farm machinery. State (including Northern Montana College) and federal government employment increased between 1979 and 1985, making government the second largest employer following agriculture.

The Helena region has been characterized by population growth (second highest among the regions in the 1970s), and recent economic stability among Montana's regions. State government is the major employer in the public sector which is the most significant basic sector in the region. Other important sectors include services, manufacturing, transportation and utilities, and finance and insurance.

The Kalispell region had the fourth highest population growth rate in the 1970s. Wood products is the major employer and agriculture, government, mining, trade and services are also central to the region's economy. Tourism and recreation are significant components of the trade and service sector in the Kalispell region. Flathead Lake, the Seeley-Swan Valley, adjacent wilderness areas, and proximity to Glacier National Park are important factors in the tourism economy.

The Lewistown region reached its population peak in 1920 and had become the smallest region by 1985. Its economic base consists mainly of agriculture, government, wood products, and mining (mostly oil and gas). The region's economy declined between 1979 and 1983, in part because of the bankruptcy of the Milwaukee Road.

The industries central to the Miles City region in 1985 were agriculture, transportation and public utilities, coal mining, state and federal government, membership organizations (including the Northern Cheyenne government), hotels and motels, and a small amount of manufacturing. The region's population is the fifth smallest of the 12 in Montana having experienced a decline following the termination of construction activities at the Colstrip electrical generating plants.

The Missoula region was the fastest growing in population during the 1970s. The primary economic forces fueling this growth were an expansion in the forest products industry, additional federal and state government employment, along with increases in tourism, transportation, and manufacturing. It is the third most populated region and, with the presence of the University of Montana, is a state cultural and educational center.

The third chapter examines the changes in employment opportunities that have occurred in Montana as a result of changes in the state's industrial structure over the period 1979-1984. Increases and decreases in employment in various industries and their impact on the number of people employed in particular occupations are described. Montana's competitive share of the nation's employment changes by industry is highlighted in this section. Additionally, the chapter analyzes the effect of employment changes on the level of earnings and unionization. Also examined are the differential in male and female earnings in Montana and the effect changing occupational opportunities have on that differential.

Over the period examined, Montana employment in all the goods-producing sectors (agriculture, mining, construction, and manufacturing) except mining declined. Outside the goods-producing sectors, however, only railroads, communications, and federal government employment declined significantly. Employment in almost all types of services grew. This shift in employment from goods-producing to service sectors in Montana paralleled the national experience but overall employment growth in Montana was below that of the U.S.

It is commonly assumed that Montana's sub-par employment growth is attributable to the concentration of the state's jobs in industries that have weakened nationally (generally considered to be the goods-producing sectors). However, this chapter reveals that Montana's share of increases in the service industries was less than the national average, in addition to poorer state performance in the goods-producing industries. Data included in the chapter illustrate the point that Montana industries failed to grow as fast as their national counterparts in every sector measured except for agriculture in which the decline in Montana was less than that experienced nationally. The state's loss in "competitive shares" was greatest in trade and services and relatively low in agriculture, mining, and transportation and public utilities.

The chapter goes on to discuss the effect of reduced earnings caused by the shift from goods-producing to service industries. The mean earnings per individual in Montana declined by about 0.5 percent as a result of industrial restructuring. The small size of the reduction is explained by the fact that although new employment in Montana was predominantly in occupations with below average earnings, the overall occupational structure was quite stable over the period.

In regard to unionization, it is concluded that the shift in industrial structure has reduced overall unionization although, as in the case of earnings, the effect is not dramatic.

The analysis of differentials in men's and women's earnings shows that in Montana's labor force, women earn from 45 percent to 56 percent of what men earn. (The former percentage is not adjusted for part-time employment while the latter applies only to full-time employment.) Possible explanations of this differential were tested in terms of differences between the men's and women's labor force in the areas of education, age, and occupational characteristics. None of these factors were shown to be responsible for the earnings differential and it is concluded that a significant share of the differential is attributable to market discrimination against women. However, because other factors, such as variable employment histories or larger family responsibilities, typically reduce the earning capacity of women relative to men, the true extent of market discrimination is difficult to measure precisely.

The final section of the third chapter analyzes the structural shift to service employment and its impact on the men's and women's earnings differential. Because the shift has been to occupations in service industries which are traditionally more likely to be held by women than occupations in the goods-producing industries and, because earnings in service industries are less than in the goods-producing industries, it is concluded that the structural shift has caused the earnings differential to increase slightly.

CHAPTER 1

OVERVIEW OF THE MONTANA ECONOMY: HISTORY AND FORECASTS

by

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Montana Department of Commerce

This chapter analyzes the Montana economy from a statewide perspective for the historical periods of 1969-1979, 1979-1985, and the first half of 1986. Forecasts are presented for 1986, 1987, 1988, and to a limited extent for 1989. The economy is analyzed using employment, earnings of workers and personal income, which includes in addition to earnings, property income (dividends, interest, rent), and transfer payments with social security being the largest component of the latter. Major expanding and declining sectors are identified in the historical analysis.

THE TEN YEAR PERIOD 1969 TO 1979

This period essentially represents the decade of the 1970s. The years 1969 and 1979 were chosen as end points so that data for either end of the period would not exert a downward or upward bias on the results. These end years represent peak years of the national business cycle, and thus minimize distortions in the analysis caused by the choice of more divergent beginning and ending years.

The period of 1969 to 1979 was a time of steady and sustained economic growth in Montana. The national economy also grew during this period but suffered recessions in 1970 and 1974-75. These periods of national recession were only minimally felt in Montana. Montana was the fourth least sensitive state to national recessions over this period. Generally only the more agriculturally oriented states like North and South Dakota were less sensitive.

In terms of the broad measures of state level economic activity, employment (jobs) and income, growth in Montana was much higher as compared with the nation over the period 1969-1979. Information produced by the Bureau of Economic Analysis, U.S. Department of Commerce, indicates that total jobs in Montana increased by about 36 percent as compared with 25 percent for the nation. Total personal income after inflation went up by 57 percent for Montana and 44 percent for the U.S. over this same time period.

Most of the employment and income increases during this period were in service-producing industries. These included health services, business and professional services, public services, retail trade (the largest growth being in eating/drinking places), wholesale trade, and transportation services.

Growth also occurred for the goods-producing sectors (agriculture, mining, construction, and manufacturing) as a group for this time period. Collectively, however, this group of industries did not grow as much as the service type sectors.

A few sectors declined over the period of 1969-1979. The most notable was agriculture. Both employment and worker earnings (includes the net income of self-employed farmers and ranchers) declined. Inflation-adjusted earnings declined by about $200 million. Agricultural earnings for the period 1972-1974 were very high, however, primarily as a result of the Russian wheat deal and other international sales. Military earnings, adjusted for inflation, decreased by a relatively small amount over the 1969-1979 time period. Another declining sector was metal mining. The earnings decline was about $6 million, approximately the same as the decline in military earnings.

Transfer payments and property income were important contributors to total personal income growth in Montana during the 1970s. Transfer payments grew at the national average rate of about 100 percent, while property income increased at a rate almost twice the U.S. rate of approximately 45 percent.
The largest transfer payment increases both nationally and in Montana were in the categories of social security and medical insurance payments.

THE PERIOD 1979 THROUGH 1985

The period of 1979 through 1985, essentially the first half of the 1980s, was a time of variable and erratic growth both in Montana and the nation. The U.S. economy grew on average over the period, but incurred two recessions, one the first half of 1980, and another the second half of 1981 through most of 1982. The national economy recovered fully from each recession. Growth from the second half of 1984 through 1985 was slow, however.

Montana's experience basically paralleled the nation but at a lower level. The state's recessions in the early 1980s were deeper than the nation's, and the state did not fully recover from them. Montana also experienced a recession in 1985 at the same time the national economy was growing slowly.

Because 1985 is the last year of complete data available at this time, it is used in this analysis. Using this year as the end point for this overall time period, however, poses a problem when comparing Montana with the nation, because 1985 was a year of growth for the U.S. and a time of recession for Montana. Thus national data will be measured between two growth years, and Montana information will have a downward bias as compared with the nation.

The above description implies that growth in the broad measures of economic activity, namely employment and personal income, would be lower for Montana as compared with the nation for the period 1979-1985. This indeed was the case. Employment as measured by total full and part-time jobs including the self-employed increased by 3 percent in Montana over the 1979-1985 period as compared with 11 percent nationwide. Montana's 3 percent increase was the same as its neighboring states of Idaho, North Dakota, and South Dakota. Wyoming's total job count went up by 7 percent even though mining, thought to be that state's primary growth determining sector, decreased in employment by 6,000 jobs between 1979 and 1985. Incidentally, the data series that measures employed persons rather than jobs increased by 6 percent in Montana and 8 percent nationally over the time period in question. After inflation, total personal income was basically flat for Montana over this time period, decreasing by 0.5 percent. Inflation adjusted personal income increased nationally by about 15 percent.

The worker earnings component of personal income, which includes self-employment income, displayed a similar pattern of Montana lagging behind the nation in growth. Inflation adjusted non-agricultural earnings decreased 6.5 percent in Montana and increased by 10 percent nationwide. After adjusting for inflation, Montana agricultural earnings increased through 1981 but decreased substantially through 1985, actually becoming negative in 1985. Nationally, agricultural earnings declined 31 percent between 1979 and 1985.

THE FIRST HALF OF 1986

In order to judge the performance of an economy for part of a year, raw data must be adjusted for fluctuations that occur with the seasons of the year, for example, extra retail trade employment in December as a result of Christmas shopping. Personal income and earnings data produced by the Bureau of Economic Analysis (BEA), U.S. Department of Commerce are the principal data series available on a seasonally adjusted basis for the analysis of state economies.

The BEA data series were the main information sources used to analyze the Montana economy for the first half of 1986. Before the analysis was started, the recently released BEA income and earnings information was modified by the author using more accurate wage and employment data, not available to the Bureau of Economic Analysis when the original information was published. The revised income data (which still should be regarded as preliminary) were then used to assess the performance of the Montana economy over the first two quarters of 1986. Raw employment data are not available adjusted for seasonal factors, and thus were used in the analysis of this period in a more limited way.

The first half of 1986 was a period of slow economic growth in Montana, with growth in the second quarter being slower than the first three months of the year. Montana total personal income increased during the first half of 1986 at an estimated seasonally adjusted annual rate of 2.7 percent (2.6 percent after inflation). The equivalent national growth rate for the first half of 1986 was 3.0 percent. This represents slow growth for the nation also.

Nonfarm worker earnings increased by about 1.9 percent over the first six months of 1986. Within the earnings category, a little more than half of the increase was accounted for by the income of self-employed persons. Most of the rest was related to higher levels of wages and salaries. The remaining small component of worker earnings, employer financing of employee benefit programs, contributed to the overall earnings increase.

Among Montana's economic sectors, private services showed the strongest growth over this time period. The increases in private services were concentrated in the traditionally expanding industries within services, namely business services, health services, and other professional services. In addition, lodging and recreation services grew.

Several specific sectors outside of private services also showed increased earnings. These included metal mining, food processing, and fabricated textile products.

There were a number of sectors that declined in earnings over the first half of 1986. These were primarily retail trade, wholesale trade, oil and gas mining, building construction, communications, and electrical machinery manufacturing.

FORECASTS OF 1986 AS A WHOLE

Three organizations regularly publish short-term (1-3 year) forecasts of the Montana economy. These are: the Bureau of Business and Economic Research, University of Montana; the

Research Department, Federal Reserve Bank of Minneapolis; and First Interstate Economics, First Interstate Bancorp. The Bureau of Business and Economic Research uses a methodology that ties short-term changes in Montana's economy to related changes in the U.S. economy. The Bureau uses forecasts of the national economy produced by Wharton Econometric Forecasting Associates. The Federal Reserve Bank's methods consist of forecasting future levels based on patterns in historical data for Montana and the U.S. economy. The methodolgy used by First Interstate Economics has not been published and is unknown at this time.

Both the Bureau of Business and Economic Research and First Interstate Economics forecast personal income. First Interstate Economics forecasts personal income to grow by about 1.5 percent in 1986, which would be similar to the experience of 1985. The Bureau of Business and Economic Research forecasts an increase of approximately 8 percent before adjusting for inflation, to a personal income level of about $9.8 billion. Key features of this forecast are the end of the drought in 1986 and the return to more normal agricultural earnings (assisted by federal subsidy payments), and an increase in earnings in the service-producing industries of transportation, communication, utilities; wholesale/retail trade; finance, insurance, real estate; private services; and public services. Data for the first half of 1986 show that earnings in all these service producing sectors increased with the exception of wholesale/retail trade and communications.

The Bureau of Business and Economic Research and the Federal Reserve Bank of Minneapolis forecast nonfarm worker earnings. Their 1986 forecasts form a range of a 3.9 percent to 4.9 percent increase in non-agricultural earnings before inflation, and 1.8 to 2.8 percent after adjusting for inflation. The historial average for adjusted earnings through expansions and contractions of the economy for the 1964-1985 period is about 2.0 percent.

Only nonfarm wage and salary jobs are forecasted by all three organizations mentioned above. This employment measure excludes the self-employed, the military, and agricultural employment. These all are important components of Montana's total jobs. Nonfarm wage and salary jobs is thus a more limited measure of employment. The forecasts range from -0.6 percent to -1.4 percent for 1986 over 1985. This translates into a decrease of 300 to 3,800 nonfarm wage and salary jobs.

The last forecasted economic variable is the unemployment rate. This is one of the hardest factors to forecast. Projections are available from the Federal Reserve Bank and from the Montana Department of Labor and Industry that range from 7.5 to 7.8 percent for 1986. Preliminary data for the first ten months of 1986 indicates a 7.7 percent average rate. The 1985 average rate was also 7.7 percent and the 1986 forecasted rate for the nation is 7.1 percent.

FORECASTS FOR 1987

The 1987 forecasts are from the same sources. With the exception of projected personal income, the forecasts generally are wider in range as compared with the 1986 forecasts.

The 1987 increase in Montana's total personal income is forecasted to be 3.5 to 6.0 percent before inflation, and -0.3 to 2.2 percent after inflation. This represents below average growth for Montana before an inflation adjustment, and slightly negative to average growth after adjusting for inflation. Wharton Econometrics forecasts a 6.1 percent national personal income increase before inflation, and 2.3 percent after inflation.

The two forecasts for nonfarm earnings form a range of a 3.1 to 6.7 percent increase before adjusting for inflation and -0.7 to 2.9 percent after inflation. The comparable national forecast is 7.4 percent before inflation, and 3.6 percent after inflation.

The total nonfarm wage and salary job increase in Montana is forecasted to be between -0.6 and 1.4 percent. The national forecast is 2.1 percent.

The jobless rate for Montana is forecasted as 7.2 to 7.7 percent for 1987, as compared with a 6.9 percent rate for the U.S.

FORECASTS FOR 1988

The forecasts of growth in Montana's economy for 1988 are generally more optimistic than comparable projections for 1986 and 1987.

Total personal income is forecasted to grow between about 5.0 and 7.0 percent before inflation, and 0.0 to 2.0 percent after inflation. The comparable national forecast made by Wharton Econometrics is approximately the same as the higher forecast for Montana.

Nonfarm worker earnings are forecasted to increase by about 3.9 to 7.6 percent, or -0.9 to 2.8 percent after inflation. Wharton Econometrics projects a U.S. increase of 8.4 percent before inflation for 1988.

Nonfarm wage and salary jobs are projected to increase by 0.5 to 1.5 percent. This compares with a national forecast of 2.3 percent.

The Federal Reserve Bank of Minneapolis is the only organization making a forecast of the unemployment rate for 1988. Its forecast of 7.6 percent for Montana compares with Wharton Econometrics' national forecast of 6.5 percent. As mentioned above, the unemployment rate is very difficult to forecast precisely.

FORECASTS FOR 1989

Of the above mentioned sources, only the Bureau of Business and Economic Research, University of Montana, makes forecasts three years in advance, or to 1989 in this case. The Bureau forecasts growth in personal income of about 7.5 percent before inflation, and 1.5 percent after inflation for 1989. The latter is near the historical average for this income variable for Montana. Nonfarm earnings are forecasted to increase by about 6 percent. No increase in nonfarm earnings is projected after accounting for inflation. Nonfarm wage and salary jobs are projected to increase 1.0 percent.

It is very important to note that the possible forecasting error increases as the forecast go further out in time. Thus the forecasts for 1989 are the most uncertain of the ones outlined in this chapter.

Even the forecasts for 1986 and 1987 contain a great deal of uncertainty. For example, the Federal Reserve Bank of Minneapolis estimates that 70 percent of its various employment growth forecasts for a future year one year after the current year (1987 in this case), will error by up to 4 percentage points either way. Some forecasts will error by less than this amount, and 30 percent will error by more than 4 percentage points. Thus the specific Federal Reserve Bank forecast of a 0.6 percent decrease in nonfarm wage and salary jobs for 1987 is better represented by -0.6 percent, plus or minus 4 percent, or -4.6 to 3.4 percent. The width of this interval indicates the degree of uncertainty of the forecast.

CHAPTER 2

ECONOMIC AND DEMOGRAPHIC CONDITIONS IN MONTANA REGIONS

by

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The following discussion is on population trends and the economies of regions in Montana. The state is divided into twelve regions, as outlined in Figure 2.1. The regional definitions used originated from work done in 1970 and 1971 for "purposes of service, administration, planning, and data reporting."[1] The result is aggregations of counties into economic regions that vary from three to six counties, and from 6,305 to 18,023 square miles.

The analysis covers the following topics: geographic orientation and land area; trends in population; labor force; sources of income; basic industries; and conclusions. Population is covered from earliest censuses to recent estimates. Employment and unemployment of the labor force are

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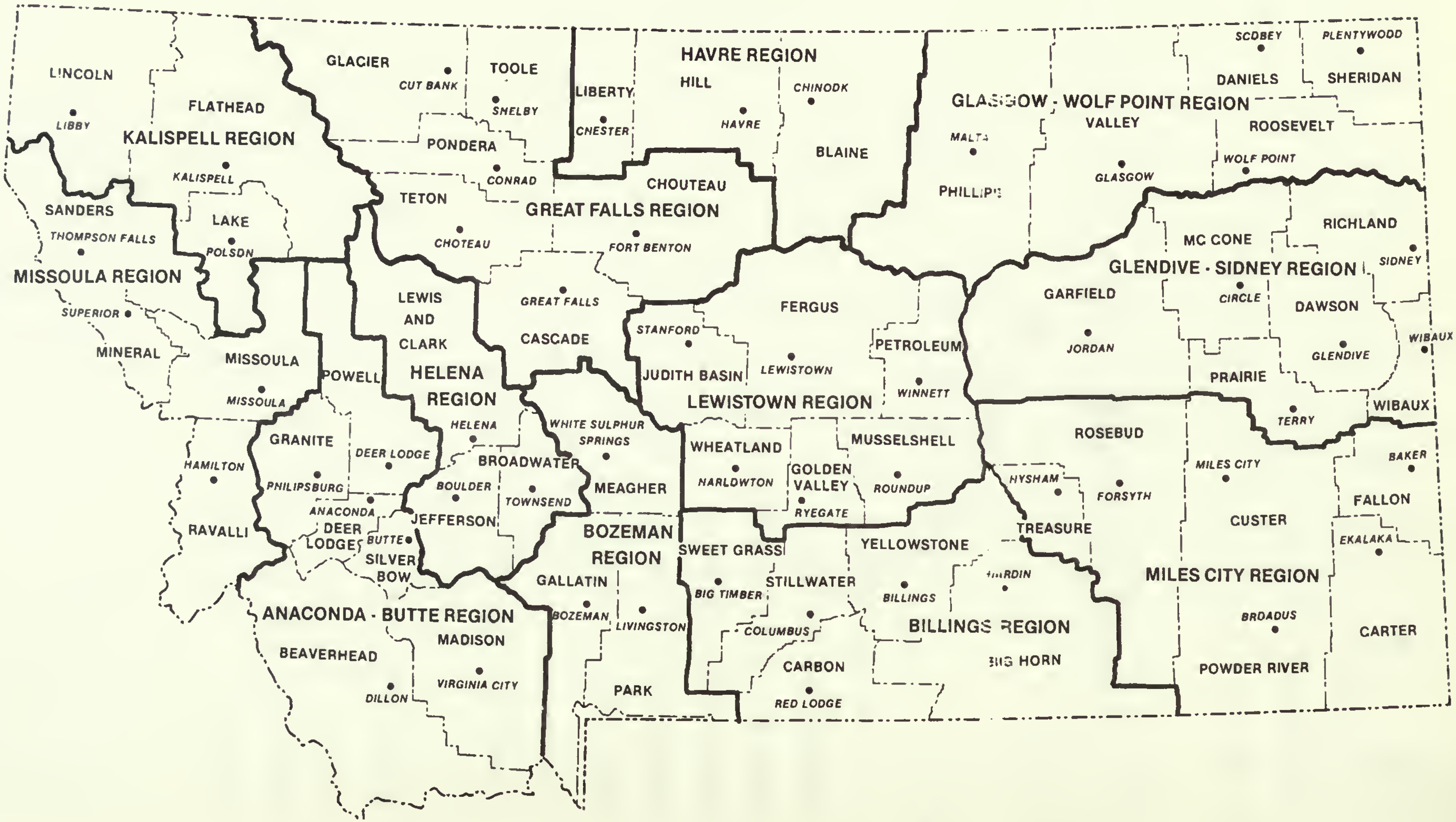
[1] From a memorandum by then Governor Forrest H. Anderson, August 25, 1971. Background work defining the regions was done by the former Montana Department of Planning and Economic Development in a document entitled "Report to the Governor: Proposed Multi-County Districts for the State of Montana," (Helena, November 1970). The regions formed then still are reasonable groupings of multi-county areas.

Figure 2.1

MONTANA'S REGIONS



examined using data from 1969 to 1985. Income is broken down into nonfarm and farm earnings, property income (interest, dividends, and rent), and transfer payments, for 1959, 1969, and 1979 through 1985. Jobs in basic, or out-of-region exporting industries, are discussed using 1979 and 1985 data, because 1979 was a peak year and 1985 is the most recent year for which annual data are available. The highest growth segment of employment over this time period, specifically the nonfarm self-employed, was omitted from the analysis of basic industries because of data limitations.

In the discussion of basic industries, (industries selling a good or service outside the region and bringing income into the region), the attempt has been to think of basic industries broadly and to realize that in some cases industries that are central to the regional economy may not be the traditional natural resource based industries. For example, state and federal government are considered basic in this discussion since they provide sources of income that are generated from outside the region and which are used to employ people inside the region. Even a portion of wholesale and retail trade can be basic, if an area draws in retail or wholesale customers from outside. More discussion of methods for defining basic industries is found in the basic industries section of this chapter and in Appendix A.

Another limitation of the analysis is that it is based primarily on selected available quantitative information, which tends to cover what might be called the "commercial economy."

Left out of this data, of course, is production for direct use, or what might be seen as the "hidden economy" that can only be discovered by intensive field work, which is more a sociological method that time and budget limits of the current study do not allow. Included in this hidden economy, among other activities, are household tasks and other unpaid labor, volunteer work, and public environmental goods including air, water, wildlife, and nature in general. In other words, the actual economy of Montana regions includes a whole spectrum of "qualities," as well as the quantities that are estimated in the various data series used for this analysis.[2] The attempt here, however, is to find a "middle ground" and include in total employment information on the self-employed and government workers.

The issue of a focus on the "commercial economy" is raised because it becomes particularly relevant in an economic development policy context. If one sees the economy as only the commercial economy, and then just the large corporate part of that as being significant, then certain policy implications follow. If one takes a closer look and thinks broadly about components of the economy, other policy implications may follow. In short, all of social and economic reality is not to be found in the many statistical tables and graphs that follow.

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[2] This point is made well by Professor Thomas Power, who chairs the University of Montana Economics Department, in "Broadening the Meaning of Local Economic Development," a paper prepared for the conference on New Directions for the Montana Economy, September 20-21, 1986 in Helena, Montana.

GEOGRAPHIC ORIENTATION

Table 2.1 indicates the size of each region outlined in Figure 1 in terms of square miles. It may be worth noting that Montana regions are as large as some states in the U.S., since Montana is the fourth largest state in the U.S. and is about one and one-half times as large as the United Kingdom. For example, the Glasgow-Wolf Point Region is approximately half again as large as Connecticut and Vermont, and double the size of New Jersey.

Table 2.1

SQUARE MILES OF LAND IN MONTANA REGIONS
1980

Region	Square Miles	Percent of Total
Montana	145,392	100.0
Anaconda-Butte	14,636	10.1
Billings	13,312	9.2
Bozeman	7,812	5.4
Glasgow-Wolf Point	15,532	10.7
Glendive-Sidney	14,192	9.8
Great Falls	15,520	10.7
Havre	8,583	5.9
Helena	6,305	4.3
Kalispell	10,221	7.0
Lewistown	12,325	8.5
Miles City	18,023	12.4
Missoula	8,931	6.1

Source: U.S. Bureau of the Census.

POPULATION

The state has grown in population in every decade since 1890 except for a small drop (about 2 percent) in population between 1920 and 1930 (Tables 2.2 and 2.3). The early years were the fastest growing in Montana's history, while the 1930s,

Table 2.2

POPULATION IN MONTANA AND IN REGIONS IN MONTANA: EARLIEST CENSUSES TO 1985

	Decennial Censuses										Estimate
	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1985
Montana	142,924	243,329	376,053	548,889	537,606	559,456	591,024	674,767	694,409	786,690	826,000
Anaconda-Butte Region	48,246	82,666	92,357	101,576	95,454	90,624	86,718	87,515	80,231	73,902	69,300
Beaverhead	4,655	5,615	6,446	7,369	6,654	6,943	6,671	7,194	8,187	8,186	8,600
Deer Lodge	15,155	17,393	12,988	15,323	16,293	13,627	16,553	18,640	15,652	12,518	11,000
Granite	...	4,328	2,942	4,167	3,013	3,401	2,773	3,014	2,737	2,700	2,700
Madison	4,692	7,695	7,229	7,495	6,323	7,294	5,998	5,211	5,014	5,448	5,900
Powell	...	...	5,904	6,909	6,202	6,152	6,301	7,002	6,660	6,958	6,000
Silver Bow	23,744	47,635	56,848	60,313	56,969	53,207	48,422	46,454	41,981	38,092	34,300
Billings Region	2,065	16,831	40,935	64,450	62,096	72,879	84,977	106,156	112,116	136,044	150,300
Big Horn	...	...	...	7,015	8,543	10,419	9,824	10,007	10,057	11,096	11,600
Carbon	...	7,533	13,962	15,279	12,571	11,865	10,241	8,317	7,080	8,099	8,600
Stillwater	...	...	...	7,630	6,253	5,694	5,416	5,526	4,632	5,598	6,700
Sweet Grass	...	3,086	4,029	4,926	3,944	3,719	3,621	3,290	2,980	3,216	3,300
Yellowstone	2,065	6,212	22,944	29,600	30,785	41,182	55,875	79,016	87,367	108,035	120,600
Bozeman Region	17,876	19,420	29,000	29,816	29,370	32,115	36,038	41,876	45,888	57,954	63,800
Gallatin	6,246	9,553	14,079	15,864	16,124	18,269	21,902	26,045	32,505	42,865	48,200
Meagher	4,749	2,526	4,190	2,622	2,272	2,237	2,079	2,616	2,122	2,154	2,200
Park	6,881	7,341	10,731	11,330	10,974	11,609	12,057	13,215	11,261	12,935	13,400
Glasgow-Wolf Point Region	0	4,355	13,630	45,047	45,483	45,256	37,887	45,051	36,084	34,333	35,400
Daniels	...	...	...	...	5,553	4,563	3,946	3,755	3,083	2,835	2,700
Phillips	...	...	...	9,311	8,208	7,892	6,334	6,027	5,386	5,367	5,700
Roosevelt	...	...	...	10,347	10,672	9,806	9,580	11,731	10,365	10,467	11,600
Sheridan	...	...	...	13,847	9,869	7,814	6,674	6,458	5,779	5,414	5,800
Valley	...	4,355	13,630	11,542	11,181	15,181	11,353	17,080	11,471	10,250	9,600
Glendive-Sidney Region	2,056	2,443	12,725	35,140	35,264	29,837	29,172	32,136	28,994	31,718	33,300
Dawson	2,056	2,443	12,725	9,239	9,881	8,618	9,092	12,314	11,269	11,805	11,700
Garfield	...	...	...	5,368	4,252	2,641	2,172	1,981	1,796	1,656	1,700
McCone	...	...	...	4,747	4,790	3,798	3,258	3,321	2,875	2,702	2,500
Prairie	...	...	...	3,684	3,941	2,410	2,377	2,318	1,752	1,836	1,800
Richland	...	...	...	8,989	9,633	10,209	10,366	10,504	9,837	12,243	14,200
Wibaux	...	...	...	3,113	2,767	2,161	1,907	1,698	1,465	1,476	1,400
Great Falls Region	13,496	41,823	55,570	69,400	74,824	78,756	90,137	115,183	117,626	116,199	117,000
Cascade	8,755	25,777	28,833	38,836	41,146	41,999	53,027	73,418	81,804	80,698	80,300
Chouteau	4,741	10,966	17,191	11,051	8,635	7,316	6,974	7,348	6,473	6,092	6,100
Glacier	...	...	...	4,178	5,297	9,034	9,645	11,565	10,783	10,628	11,500
Pondera	...	...	...	5,741	6,964	6,716	6,392	7,653	6,611	6,731	6,900
Teton	...	5,080	9,546	5,870	6,068	6,922	7,232	7,295	6,116	6,491	6,500
Toole	...	...	...	3,724	6,714	6,769	6,867	7,904	5,839	5,559	5,700
Havre Region	0	0	0	25,431	24,979	25,079	24,981	29,368	26,444	27,313	27,700
Blaine	...	...	...	9,057	9,006	9,566	8,516	8,091	6,727	6,999	7,100
Hill	...	...	...	13,958	13,775	13,304	14,285	18,653	17,358	17,985	18,100
Liberty	...	...	...	2,416	2,198	2,209	2,180	2,624	2,359	2,329	2,500
Helena Region	25,171	27,142	30,945	27,102	25,095	30,246	31,476	35,107	41,045	53,335	57,600
Broadwater	...	2,641	3,491	3,239	2,738	3,451	2,922	2,804	2,526	3,267	3,500
Jefferson	6,026	5,330	5,601	5,203	4,133	4,664	4,014	4,297	5,238	7,029	8,000
Lewis & Clark	19,145	19,171	21,853	18,660	18,224	22,131	24,540	28,006	33,281	43,039	46,100
Kalispell Region	0	9,375	22,423	29,502	35,830	45,643	54,023	58,606	71,968	88,774	96,400
Flathead	...	9,375	18,785	21,705	19,200	24,271	31,495	32,965	39,460	51,966	56,800
Lake	...	...	...	...	9,541	13,490	13,835	13,104	14,445	19,056	20,800
Lincoln	...	...	3,638	7,797	7,089	7,882	8,693	12,537	18,063	17,752	18,800
Lewistown Region	3,514	6,937	17,385	45,993	38,933	29,388	28,173	27,114	23,147	24,190	24,400
Fergus	3,514	6,937	17,385	28,344	16,531	14,040	14,015	14,018	12,611	13,076	12,800
Golden Valley	...	...	...	...	2,126	1,607	1,337	1,203	931	1,026	1,100
Judith Basin	...	...	...	...	5,238	3,655	3,200	3,085	2,667	2,646	2,700
Musselshell	...	...	...	12,030	7,242	5,717	5,408	4,888	3,734	4,428	4,800
Petroleum	...	...	...	...	2,045	1,083	1,026	894	675	655	700
Wheatland	...	...	...	5,619	3,751	3,286	3,187	3,026	2,529	2,359	2,300
Miles City Region	5,308	7,891	22,108	34,063	32,863	28,556	29,784	29,734	28,143	32,071	35,700
Carter	...	...	...	3,972	4,136	3,280	2,798	2,493	1,956	1,799	1,700
Custer	5,308	7,891	14,123	12,194	11,242	10,422	12,661	13,227	12,174	13,109	13,300
Fallon	...	...	...	4,548	4,568	3,719	3,660	3,997	4,050	3,763	3,700
Powder River	...	...	...	3,357	3,909	3,159	2,693	2,485	2,862	2,520	2,500
Rosebud	...	...	7,985	8,002	7,347	6,477	6,570	6,187	6,032	9,899	13,500
Treasure	...	...	...	1,990	1,661	1,499	1,402	1,345	1,069	981	1,000
Missoula Region	14,427	21,786	38,975	41,369	39,415	51,077	57,658	66,921	82,723	110,859	115,100
Mineral	...	...	...	2,327	1,626	2,135	2,081	3,037	2,958	3,675	3,600
Missoula	14,427	13,964	23,596	24,041	21,782	29,038	35,493	44,663	58,263	76,016	77,300
Ravalli	...	7,822	11,666	10,098	10,315	12,978	13,101	12,341	14,409	22,493	25,000
Sanders	...	...	3,713	4,903	5,692	6,926	6,983	6,880	7,093	8,675	9,200

... Not Applicable.

Note - In 1890 the sum of counties is not the state total; the difference is Indian reservations. In 1900 the Crow Reservation is not included in county data.

Source: U.S. Bureau of the Census. Compiled by the Office of Economic Analysis, Montana Department of Commerce, 1986.

Table 2.3

POPULATION CHANGE FROM PREVIOUS PERIOD: 1900 TO 1985

	Decennial Censuses								Estimate	
	1900	1910	1920	1930	1940	1950	1960	1970	1980	1985
Montana	70.3%	54.5%	46.0%	-2.1%	4.1%	5.6%	14.2%	2.9%	13.3%	5.0%
Anaconda-Butte Region	71.3%	11.7%	10.0%	-6.0%	-5.1%	-4.3%	0.9%	-8.3%	-7.9%	-6.2%
Beaverhead	20.6%	14.8%	14.3%	-9.7%	4.3%	-3.9%	7.8%	13.8%	0.0%	5.1%
Deer Lodge	14.8%	-25.3%	18.0%	6.3%	-16.4%	21.5%	12.6%	-16.0%	-20.0%	-12.1%
Granite	...	-32.0%	41.6%	-27.7%	12.9%	-18.5%	8.7%	-9.2%	-1.4%	0.0%
Madison	64.0%	-6.1%	3.7%	-15.6%	15.4%	-17.8%	-13.1%	-3.8%	8.7%	8.3%
Powell	...	...	17.0%	-10.2%	-0.8%	2.4%	11.1%	-4.9%	4.5%	-2.3%
Silver Bow	100.6%	19.3%	6.1%	-5.5%	-6.6%	-9.0%	-4.1%	-9.6%	-9.3%	-10.0%
Billings Region	715.1%	143.2%	57.4%	-3.7%	17.4%	16.6%	24.9%	5.6%	21.3%	10.5%
Big Horn	...	...	...	21.8%	22.0%	-5.7%	1.9%	0.5%	10.3%	4.5%
Carbon	...	85.3%	9.4%	-17.7%	-5.6%	-13.7%	-18.8%	-14.9%	14.4%	6.2%
Stillwater	...	...	...	-18.0%	-8.9%	-4.9%	2.0%	-16.2%	20.9%	10.8%
Sweet Grass	...	30.6%	22.3%	-19.9%	-5.7%	-2.6%	-9.1%	-9.4%	7.9%	2.6%
Yellowstone	200.8%	269.3%	29.0%	4.0%	33.8%	35.7%	41.4%	10.6%	23.7%	11.6%
Bozeman Region	8.6%	49.3%	2.8%	-1.5%	9.3%	12.2%	16.2%	9.6%	26.3%	10.1%
Gallatin	52.9%	47.4%	12.7%	1.6%	13.3%	19.9%	18.9%	24.8%	31.9%	12.4%
Meagher	-46.8%	65.9%	-37.4%	-13.3%	-1.5%	-7.1%	25.8%	-18.9%	1.5%	2.1%
Park	6.7%	46.2%	5.6%	-3.1%	5.8%	3.9%	9.6%	-14.8%	14.9%	3.6%
Glasgow-Wolf Point Region	...	213.0%	230.5%	1.0%	-0.5%	-16.3%	18.9%	-19.9%	-4.9%	3.1%
Daniels	...	...	...	...	-17.8%	-13.5%	-4.8%	-17.9%	-8.0%	-4.8%
Phillips	...	...	...	-11.8%	-3.8%	-19.7%	-4.8%	-10.6%	-0.4%	6.2%
Roosevelt	...	...	...	3.1%	-8.1%	-2.3%	22.5%	-11.6%	1.0%	10.8%
Sheridan	...	...	...	-28.7%	-20.8%	-14.6%	-3.2%	-10.5%	-6.3%	7.1%
Valley	...	213.0%	-15.3%	-3.1%	35.8%	-25.2%	50.4%	-32.8%	-10.6%	-6.3%
Glendive-Sidney Region	18.8%	420.9%	176.1%	0.4%	-15.4%	-2.2%	10.2%	-9.8%	9.4%	5.0%
Dawson	18.8%	420.9%	-27.4%	6.9%	-12.8%	5.5%	35.4%	-8.5%	4.8%	-0.9%
Garfield	...	...	...	-20.8%	-37.9%	-17.8%	-8.8%	-9.3%	-7.8%	2.7%
McCone	...	...	...	0.9%	-20.7%	-14.2%	1.9%	-13.4%	-6.0%	-7.5%
Prairie	...	...	...	7.0%	-38.6%	-1.4%	-2.5%	-24.4%	4.8%	-2.0%
Richland	...	...	...	7.2%	6.0%	1.5%	1.3%	-6.3%	24.5%	16.0%
Wibaux	...	...	...	-11.1%	-21.9%	-11.8%	-11.0%	-13.7%	0.8%	-5.1%
Great Falls Region	209.9%	32.9%	24.9%	7.8%	5.3%	14.5%	27.8%	2.1%	-1.2%	0.7%
Cascade	194.4%	11.9%	34.7%	5.9%	2.1%	26.3%	38.5%	11.4%	-1.4%	-0.5%
Chouteau	131.3%	56.8%	-35.7%	-21.9%	-15.3%	-4.7%	5.4%	-11.9%	-5.9%	0.1%
Glacier	...	...	...	26.8%	70.5%	6.8%	19.9%	-6.8%	-1.4%	8.2%
Pondera	...	...	...	21.3%	-3.6%	-4.8%	19.7%	-13.6%	1.8%	2.5%
Teton	...	87.9%	-38.5%	3.4%	14.1%	4.5%	0.9%	-16.2%	6.1%	0.1%
Toole	...	...	...	80.3%	0.8%	1.4%	15.1%	-26.1%	-4.8%	2.5%
Havre Region	...	...	...	-1.8%	0.4%	-0.4%	17.6%	-10.0%	3.3%	1.4%
Blaine	...	...	...	-0.6%	6.2%	-11.0%	-5.0%	-16.9%	4.0%	1.4%
Hill	...	...	...	-1.3%	-3.4%	7.4%	30.6%	-6.9%	3.6%	0.6%
Liberty	...	...	...	-9.0%	0.5%	-1.3%	20.4%	-10.1%	-1.3%	7.3%
Helena Region	7.8%	14.0%	-12.4%	-7.4%	20.5%	4.1%	11.5%	16.9%	29.9%	8.0%
Broadwater	...	32.2%	-7.2%	-15.5%	26.0%	-15.3%	-4.0%	-9.9%	29.3%	7.1%
Jefferson	-11.5%	5.1%	-7.1%	-20.6%	12.8%	-13.9%	7.1%	21.9%	34.2%	13.8%
Lewis & Clark	0.1%	14.0%	-14.6%	-2.3%	21.4%	10.9%	14.1%	18.8%	29.3%	7.1%
Kalispell Region	...	139.2%	31.6%	21.4%	27.4%	18.4%	8.5%	22.8%	23.4%	8.6%
Flathead	...	100.4%	15.5%	-11.5%	26.4%	29.8%	4.7%	19.7%	31.7%	9.3%
Lake	...	...	...	...	41.4%	2.6%	-5.3%	10.2%	31.9%	9.2%
Lincoln	...	...	114.3%	-9.1%	11.2%	10.3%	44.2%	44.1%	-1.7%	5.9%
Lewistown Region	97.4%	150.6%	164.6%	-19.7%	-20.4%	-4.1%	-3.8%	-14.6%	4.5%	0.9%
Fergus	97.4%	150.6%	63.0%	-41.7%	-15.1%	-0.2%	0.0%	-10.0%	3.7%	-2.1%
Golden Valley	...	...	...	...	-24.4%	-16.8%	-10.0%	-22.6%	10.2%	7.2%
Judith Basin	...	...	...	...	-30.2%	-12.4%	-3.6%	-13.5%	-0.8%	2.0%
Musselshell	...	...	...	-39.8%	-21.1%	-5.4%	-9.6%	-23.6%	18.6%	8.4%
Petroleum	...	...	...	...	-47.0%	-5.3%	-12.9%	-24.5%	-3.0%	6.9%
Wheatland	...	...	...	-33.2%	-12.4%	-3.0%	-5.1%	-16.4%	-6.7%	-2.5%
Miles City Region	48.7%	180.2%	54.1%	-3.5%	-13.1%	4.3%	-0.2%	-5.4%	14.0%	11.3%
Carter	...	...	...	4.1%	-20.7%	-14.7%	-10.9%	-21.5%	-8.0%	-5.5%
Custer	48.7%	79.0%	-13.7%	-7.8%	-7.3%	21.5%	4.5%	-8.0%	7.7%	1.5%
Fallon	...	...	...	0.4%	-18.6%	-1.6%	9.2%	1.3%	-7.1%	-1.7%
Powder River	...	...	...	16.4%	-19.2%	-14.8%	-7.7%	15.2%	-11.9%	-0.8%
Rosebud	...	...	0.2%	-8.2%	-11.8%	1.4%	-5.6%	-2.5%	64.1%	36.4%
Treasure	...	...	...	-16.5%	-9.8%	-6.5%	-4.1%	-20.5%	-8.2%	1.9%
Missoula Region	51.0%	78.9%	6.1%	-4.7%	29.6%	12.9%	16.1%	23.6%	34.0%	3.8%
Mineral	...	...	...	-30.1%	31.3%	-2.5%	45.9%	-2.6%	24.2%	-2.0%
Missoula	-3.2%	69.0%	1.9%	-9.4%	33.3%	22.2%	25.8%	30.5%	30.5%	1.7%
Ravalli	...	49.1%	-13.4%	2.1%	25.8%	0.9%	-5.8%	16.8%	56.1%	11.1%
Sanders	...	...	32.0%	16.1%	21.7%	0.8%	-1.5%	3.1%	22.3%	6.1%

... Not Applicable.

Source: U.S. Bureau of the Census. Change derived by the Office of Economic Analysis, Montana Department of Commerce, 1986.

1940s, and 1960s were periods of slow growth. The 1950s and 1970s were decades of moderate growth, at 14.2 and 13.3 percent respectively. The population estimates for 1985 suggest a 5.0 percent increase in population over the 1980 census. As Table 2.4 indicates, the state's population density (or persons per square mile) was 5.4 in 1980.

The Anaconda-Butte Region

The regions vary greatly in their rates of population growth. The Anaconda-Butte region (Beaverhead, Deer Lodge, Granite, Madison, Powell, and Silver Bow counties) in southwestern Montana peaked in 1920 and has been declining in population ever since (Table 2.2 and Figure 2.2). The 1985 estimate of 69,300 is roughly two-thirds of the 1920 census figure. The decade of the 1970s brought a 7.9 percent decline in the region's population, and in the 1980s the decline has been another 6.2 percent (Table 2.3). The region had the fifth largest population of the twelve regions in 1985. Population density, or persons per square mile, was 5.0 in 1980, which was very similar to the state figure of 5.4 (Table 2.4).

The Billings Region

The Billings region in south central Montana (Big Horn, Carbon, Stillwater, Sweet Grass, and Yellowstone counties) which includes the Billings Metropolitan Statistical Area (MSA)[3], one of two in the state, has experienced rapid growth

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[3] The general concept of a metropolitan area is one of a large population nucleus, together with adjacent communities which have a high degree of economic and social integration with that nucleus. A Metropolitan Statistical Area is defined as one or more counties. The criteria for the establishment

Table 2.4

PERSONS PER SQUARE MILE IN MONTANA & REGIONS: 1980

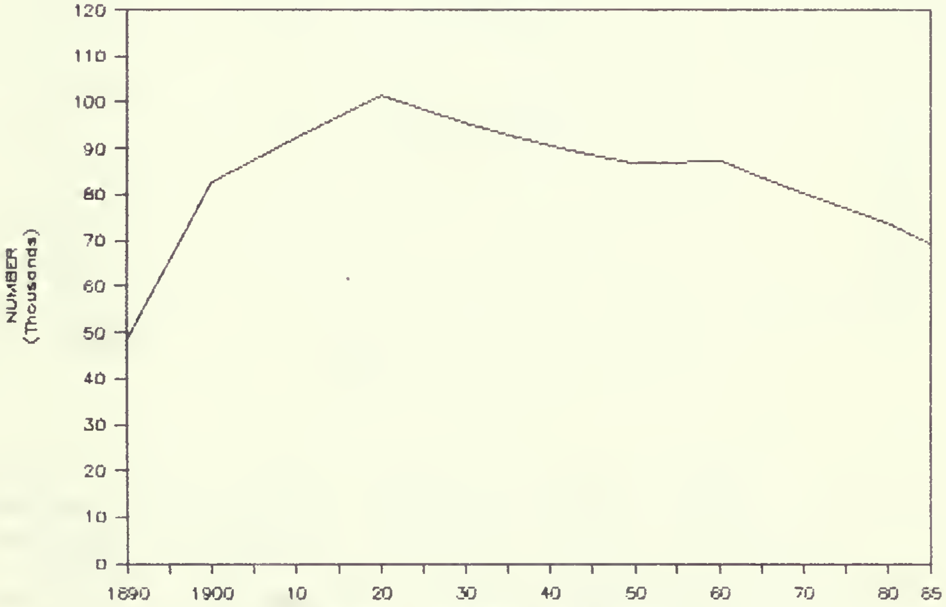
Montana	5.4
Anaconda-Butte Region	5.0
Billings Region	10.2
Bozeman Region	7.4
Glasgow-Wolf Point Region	2.2
Glendive-Sidney Region	2.2
Great Falls Region	7.5
Havre Region	3.2
Helena Region	8.5
Kalispell Region	8.7
Lewistown Region	2.0
Miles City Region	1.8
Missoula Region	12.4

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Derived from U.S. Bureau of the Census data.

Figure 2.2

POPULATION OF THE ANACONDA—BUTTE REGION

1890 – 1985



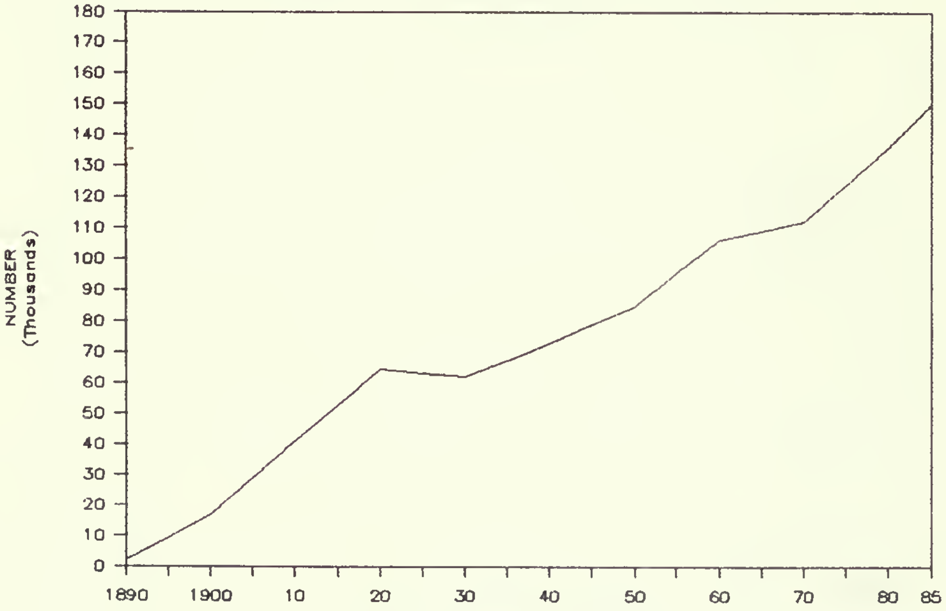
SOURCE: U.S. BUREAU OF THE CENSUS.

resulting in the state's largest regional population at an estimated 150,300 in 1985 (Tables 2.2 and 2.3 and Figure 2.3). Like the state, the region lost some of its population in the 1920s. In the 1970s the growth of population was 21.3 percent, or 1.6 times the state rate. The 1980 to 1985 growth rate was estimated at 10.5 percent, or about double the state rate. This region easily ranks first in population currently and has a population density of 10.2, the second highest in the state.

Figure 2.3

POPULATION OF THE BILLINGS REGION

1890 – 1985



SOURCE: U.S. BUREAU OF THE CENSUS.

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and definition of MSA's are formulated by the U.S. Office of Management and Budget. The current standards provide that each MSA must include at least one city with 50,000 or more inhabitants, or a Census Bureau defined urbanized area of at least 50,000 inhabitants and a total MSA population of at least 100,000 (75,000 in New England). The two MSA's in Montana, Billings and Great Falls, are of the former type. (Explanation from U.S. Bureau of the Census, *State and Metropolitan Area Data Book*, 1986, p. 674.)

The Billings region also contains the reservation that is the home of the Crow Indian Tribe. This reservation is one of seven Indian reservations in the state. Most of the Crow Reservation population lives in Big Horn County. In 1980, according to the U.S. Bureau of the Census, the reservation population was 5,973, of whom 66.2 percent were Indian.[4] The vast majority, or about 92 percent, of Indians on the reservation were Crow.[5]

The Bozeman Region

The Bozeman region (Gallatin, Meagher, and Park counties) in south central Montana is also one characterized by growth at rates substantially more rapid than the state in recent decades (Table 2.3 and Figure 2.4). It too lost some population in the 1920s (Table 2.2). The region has been a high growth area in recent years, with a rate of 26.3 percent in the 1970s, and 10.1 percent from 1980 to 1985. The region ranks sixth in population among the regions. Population density in 1980 was 7.7, fifth of the state's regions (Table 2.4).

The Glasgow-Wolf Point Region

As Figure 2.5 indicates, the Glasgow-Wolf Point region (Daniels, Phillips, Roosevelt, Sheridan, and Valley counties)

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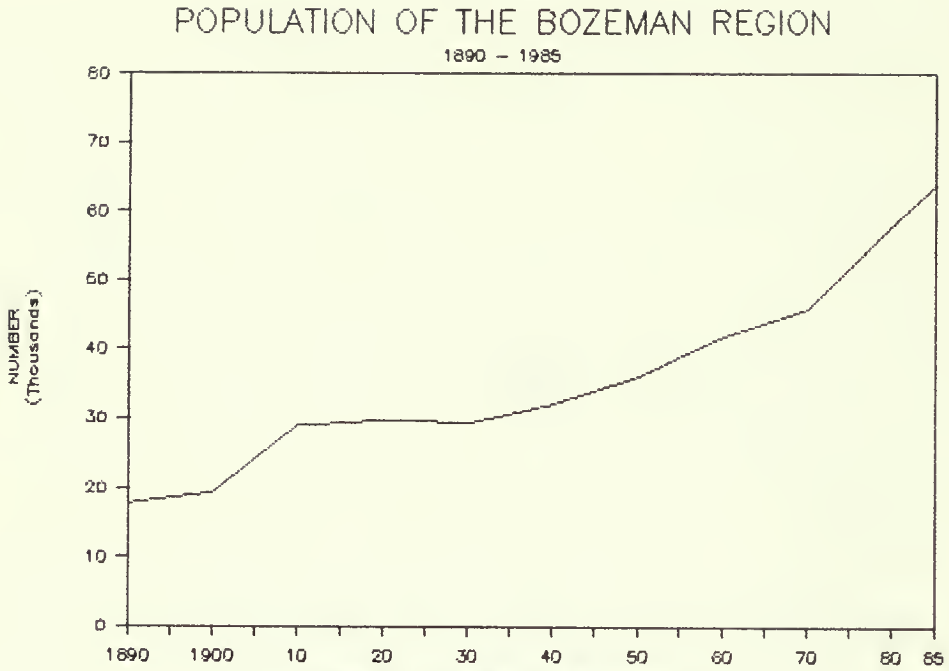
[4] For overview data on Montana Indians see an unpublished document compiled by Dwayne Ward, "Montana Indians: Population, Employment, and Income," (Helena: Montana Department of Commerce, December 1985).

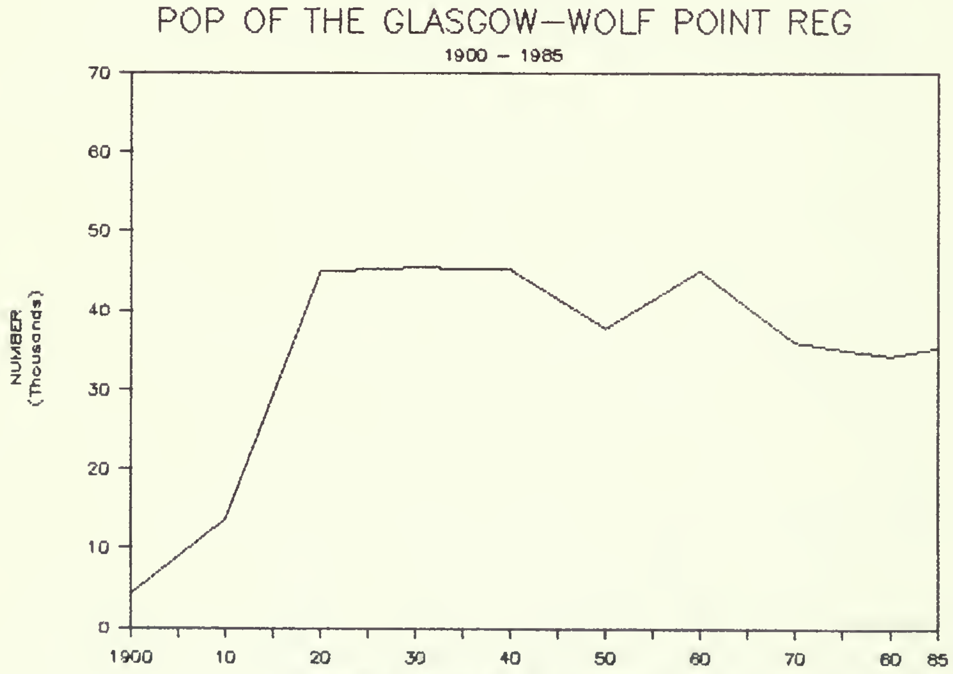
[5] Tribal affiliation or membership of Indian reservation residents is found in U.S. Bureau of the Census, American Indians, Eskimos, and Aleuts on Identified Reservations and in the Historic Areas of Oklahoma, (Washington, D.C.: U.S. Government Printing Office, November 1985).

Figure 2.4



SOURCE: U.S. BUREAU OF THE CENSUS.

Figure 2.5



SOURCE: U.S. BUREAU OF THE CENSUS.

in northeastern Montana has experienced somewhat erratic population change. There was very rapid growth from 1900 to 1920 and the historic peak was reached by 1930, at 45,483. Population stayed at a level around 45,000 in the censuses of 1920, 1930, and 1940 but then dropped by the 1950 census to 37,887. The previous level of about 45,000 was again reached in the 1960 census, but fell to a little over 36,000 in the 1970 census, which was close to the estimated 1985 population.

The 1950 to 1960 population growth was associated with the U.S. Air Force base north of Glasgow, however the base shut down, greatly contributing to the population decline since 1960. The 1980 population figure for the region was 35,400, and estimates to 1985 indicate 3.1 percent total growth since 1980. The latest estimate is about three fourths of the historic peak. The region ranks ninth in regional population (Table 2.2). Population density in the region was 2.2 in 1980, which tied for third lowest in the state (Table 2.4).

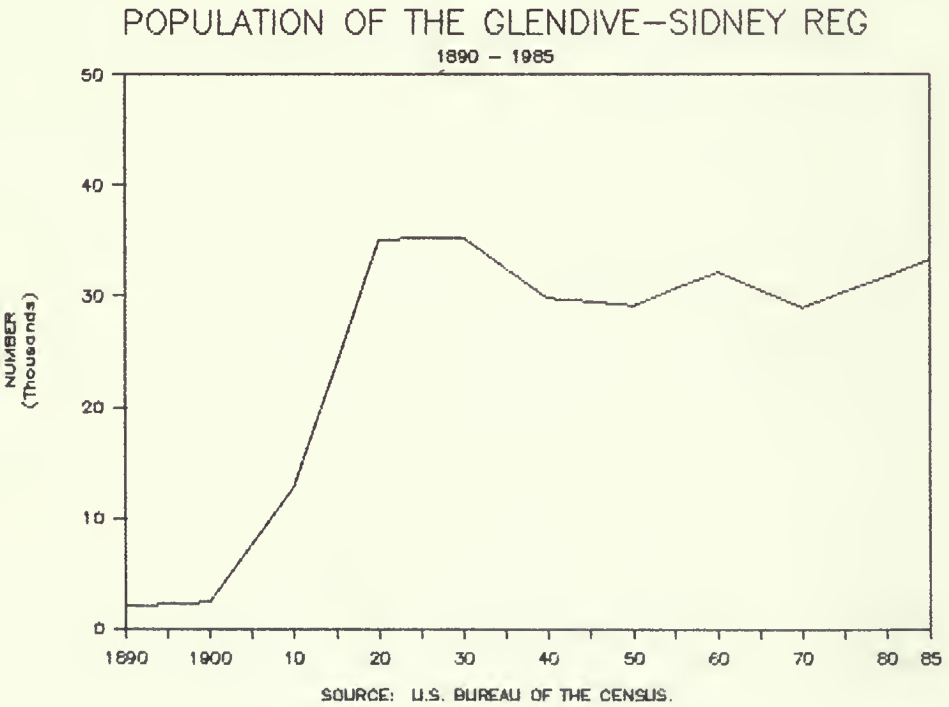
The Glasgow-Wolf Point region also contains the Fort Peck Indian Reservation, the home of Assiniboine, Chippewa, Cree, and Gros Ventres people. These native groups comprised respectively 55 percent, 29 percent, 7 percent, and less than 1 percent of a total of 4,273 Indian people on the reservation in 1980.

Overall, the Glasgow-Wolf Point region has a relatively large Indian population, at slightly over 15 percent, compared with 4.5 percent for the state in 1980. In Roosevelt County about 37 percent of the people were Indian in 1980.

The Glendive-Sidney Region

The Glendive-Sidney region (Dawson, Garfield, McCone, Prairie, Richland, and Wibaux counties) in eastern Montana peaked in population in 1930 at 35,264, and in 1985 population was estimated at 33,300 (Table 2.2). It ranks tenth among the regions in population. There was population decline in the 1930s, 1950s, and 1960s (Figure 2.6). Growth in the 1970s was 9.4 percent, or somewhat less than the state rate (Table 2.3). In the 1980s, estimates suggest modest growth at the state rate. The 1980 population density was 2.2, tied for third lowest (Table 2.4).

Figure 2.6



The Great Falls Region

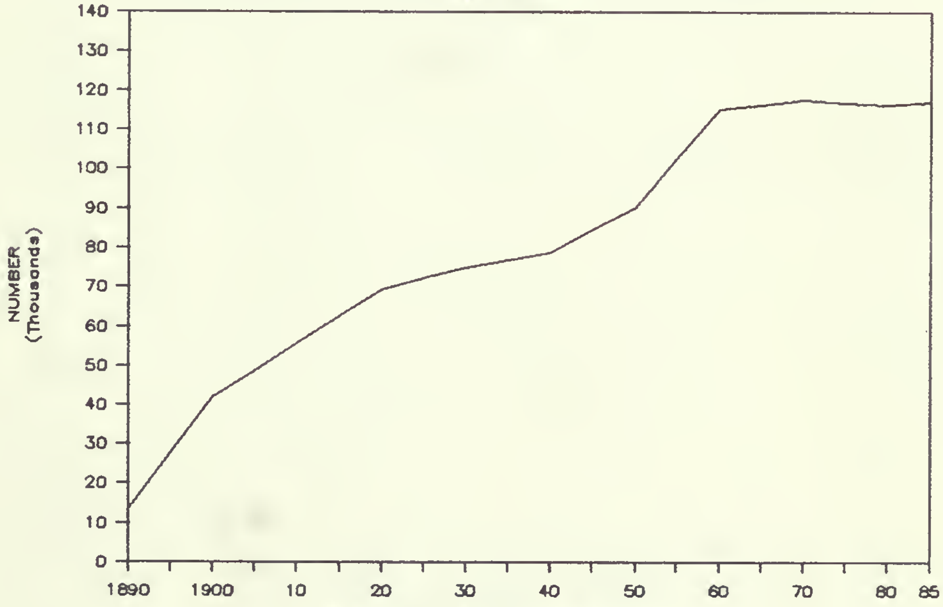
Cascade County in north central Montana is the second Metropolitan Statistical Area in Montana. The region as a whole (Cascade, Chouteau, Glacier, Pondera, Teton, and Toole counties) ran counter to state trends and grew substantially in the 1920s and 1950s, and like the state, grew slowly in the 1960s, but declined slightly between 1970 and 1980 (Figure 2.7 and Table 2.2). The 1980s have shown virtually no growth in the region's population. In 1985 the estimated population of the region was 117,000, which was the second largest in the state. Population density was 7.5, the fifth highest of the state's regions (Table 2.4).

The region contains all of the Blackfeet Reservation, which is in Glacier and Pondera counties. A 1983 special

Figure 2.7

POPULATION OF THE GREAT FALLS REGION

1890 – 1985



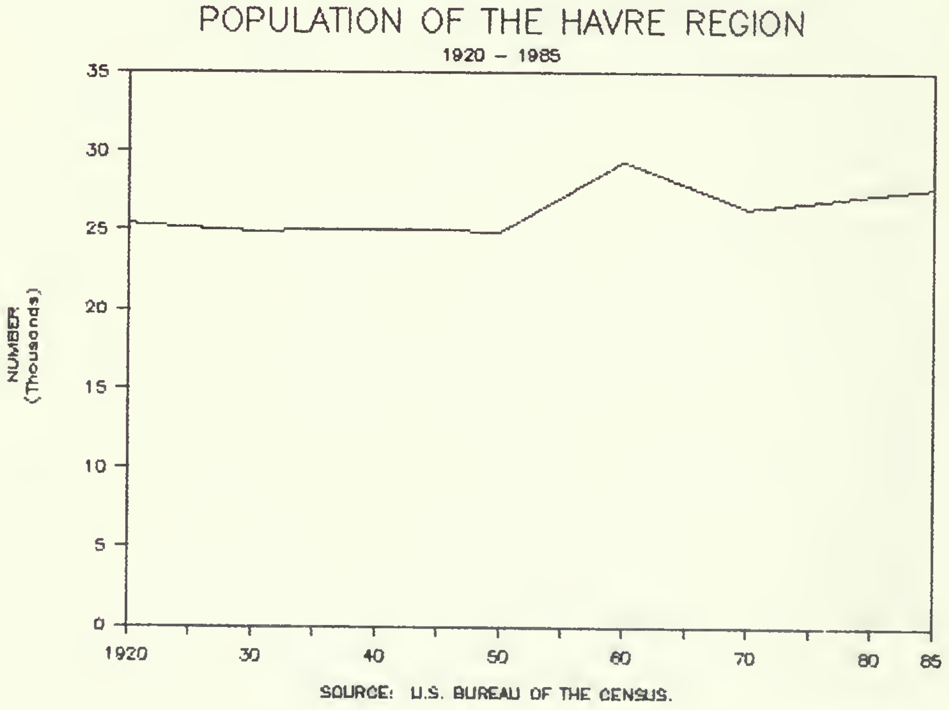
SOURCE: U.S. BUREAU OF THE CENSUS.

census indicated 8,851 people on the reservation, of whom 7,284 (82.3 percent) were Indian. In 1980, according to the U.S. Bureau of the Census, 87.8 percent of Indians on the reservation were Blackfeet.

The Havre Region

The Havre region in northern Montana (Blaine, Hill, and Liberty counties) has had a relatively steady population since 1920 (Figure 2.8), and stood at an estimated 27,700 in 1985, the second lowest of all regions. There was 17.6 percent population growth in the 1950s, however, and a 10 percent drop occurred between 1960 and 1970 (Table 2.3). Statewide growth trends since 1970 were not present in the Havre region. Population density was 3.2, fourth from the lowest region in 1980 (Table 2.4).

Figure 2.8



The region contains most of the population of the Fort Belknap Reservation. In 1980 the total reservation population, according to the U.S. Bureau of the Census, was 2,060, with 1,854 in Blaine County. Of the total population, 1,870, or 90.8 percent, were Indian. The two dominant tribal affiliations were Assiniboine (38 percent) and Gros Ventres (35 percent).

The Havre region also has most of the population of the Rocky Boy's Reservation in Hill County (1,511 out of a total reservation population of 1,650 people) and 1,549, or almost 94 percent of the reservation's population were Indian. Cree accounted for about 82 percent of the native population on the reservation.

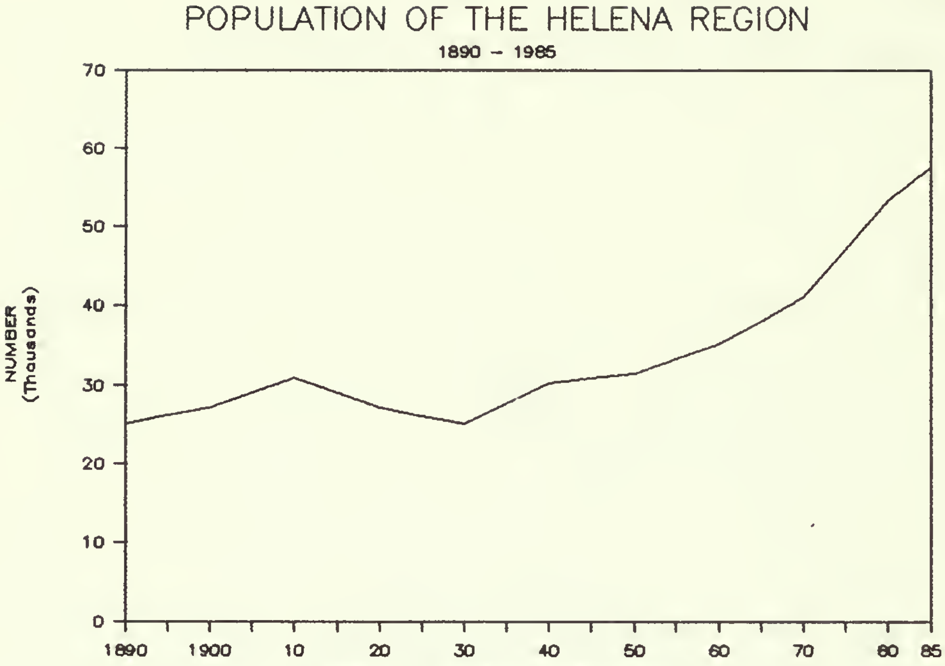
The Helena Region

The Helena regional (Broadwater, Jefferson, and Lewis and Clark counties) population grew substantially in the period 1890 to 1985, except in the 1910 to 1930 period, when there were declines in population (Table 2.2 and Figure 2.9). The region grew at a rate higher than the state's since 1950, and at a rate more than double that in the state in the 1970s. Growth has been at an estimated eight percent since 1980 (Table 2.3). The 1985 estimated population of 57,600 was seventh largest among regions. Population density of 8.5 was fourth highest of regions (Table 2.4).

The Kalispell Region

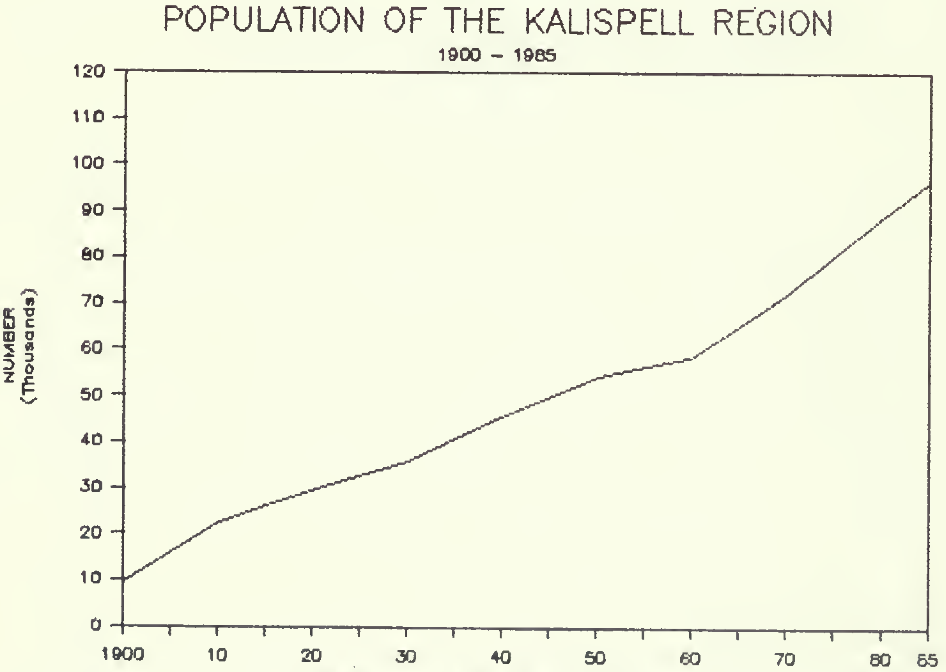
As Table 2.3 and Figure 2.10 indicate, the Kalispell region (Flathead, Lake, and Lincoln counties) in northwestern

Figure 2.9



SOURCE: U.S. BUREAU OF THE CENSUS.

Figure 2.10



SOURCE: U.S. BUREAU OF THE CENSUS.

Montana has grown at rates much higher than the state since 1900, with the exception of only the 1950s, when regional growth was 8.5 percent compared to state growth of 14.2 percent. In the 1970 to 1980 period, growth was 23.4 percent, or 1.8 times the state rate. Population was estimated at 96,400 in 1985, which was the fourth largest in the state among the twelve regions (Table 2.2). Population density in 1980 was 8.7 per square mile, third greatest in the state (Table 2.4).

The region contains the majority of the population of the Confederated Salish and Kootenai Tribes' Flathead Reservation in Lake County, or 17,058 (86.9 percent) of a total reservation population of 19,628 in 1980. There were 3,771 (or 19.2 percent of the total) Indian people on the reservation.

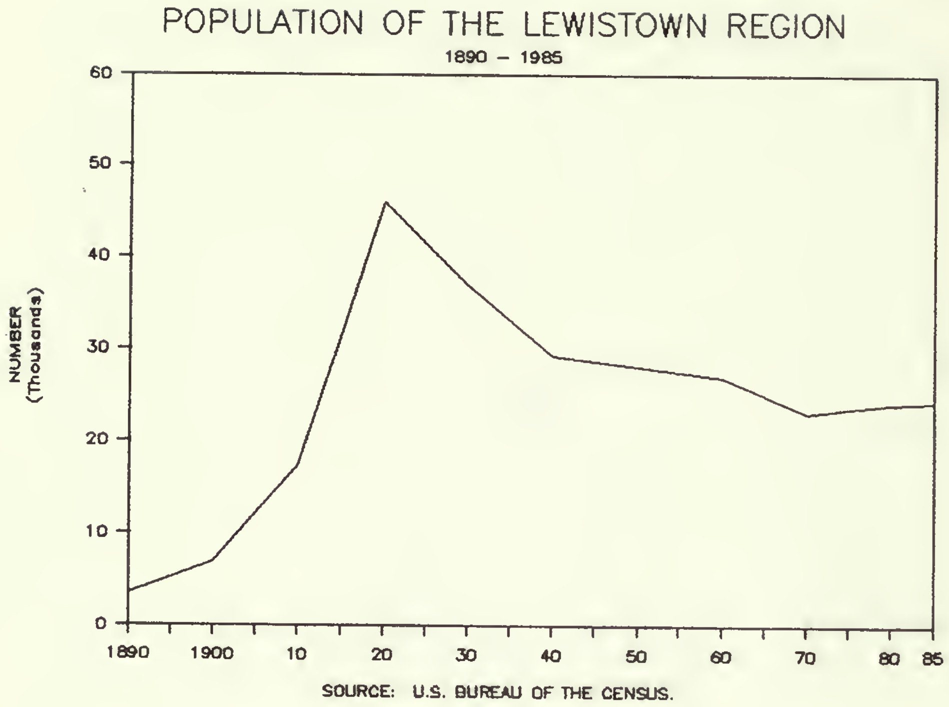
The Lewistown Region

The Lewistown region (Fergus, Golden Valley, Judith Basin, Musselshell, Petroleum, and Wheatland counties), which is the geographic center of the state, grew rapidly to 1920 and then declined to 1970 (Table 2.2 and Figure 2.11). Since then population has remained approximately constant. In 1985 the population of the region was estimated at 24,400, lowest in the state. Population density in 1980 was 2 per square mile, second lowest among regions (Table 2.4).

The Miles City Region

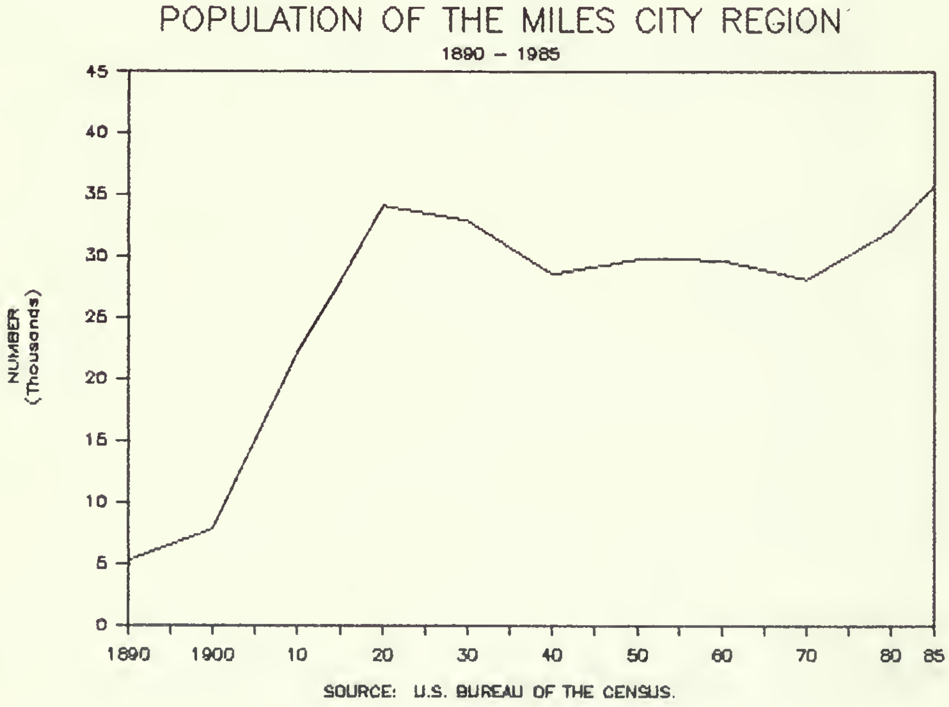
The Miles City region (Carter, Custer, Fallon, Powder River, Rosebud, and Treasure counties) in southeastern Montana contained over 34,000 people by 1920, but then the population fell to about 27,700 by 1970 (Table 2.2 and Figure 2.12). The

Figure 2.11



SOURCE: U.S. BUREAU OF THE CENSUS.

Figure 2.12



SOURCE: U.S. BUREAU OF THE CENSUS.

estimated population rose to its historic peak of nearly 36,000 by 1983.

The fact that the region contains extensive coal deposits, including two of Montana's five currently existing large coal mines, and four large coal fired electricity generating units at Colstrip explains the population change since 1970. It appears that coal mining and conversion are the only reasons that the trend toward smaller rural populations in the region was reversed in recent years. The pattern in Rosebud County, for example, was a decreasing population between 1920 and 1970 and then a sharp increase since 1970.

Included in the region is most of the Northern Cheyenne Tribe's Reservation in Rosebud County. Growth of the Indian population on the reservation appears to have been about 50 percent since 1970, from 2,450 to 3,680 in 1985. Total population, Indian and non-Indian, on the reservation is thought to have grown from 2,895 in 1970 to 4,245 in 1985, or almost 47 percent.[6]

The explanation of Northern Cheyenne population growth is found in natural increase (excess of births over deaths) and from in-migration of Indian people because of perceived employment opportunities surrounding coal development, employment opportunities on the reservation generated by revenues from tribally owned (actual and potential) mineral resources, and an increased housing supply on the reservation. It is thought that migration accounted for one-fourth of the population increase between 1970 and 1976 and about 40 percent of growth between 1980 and 1982.[7]

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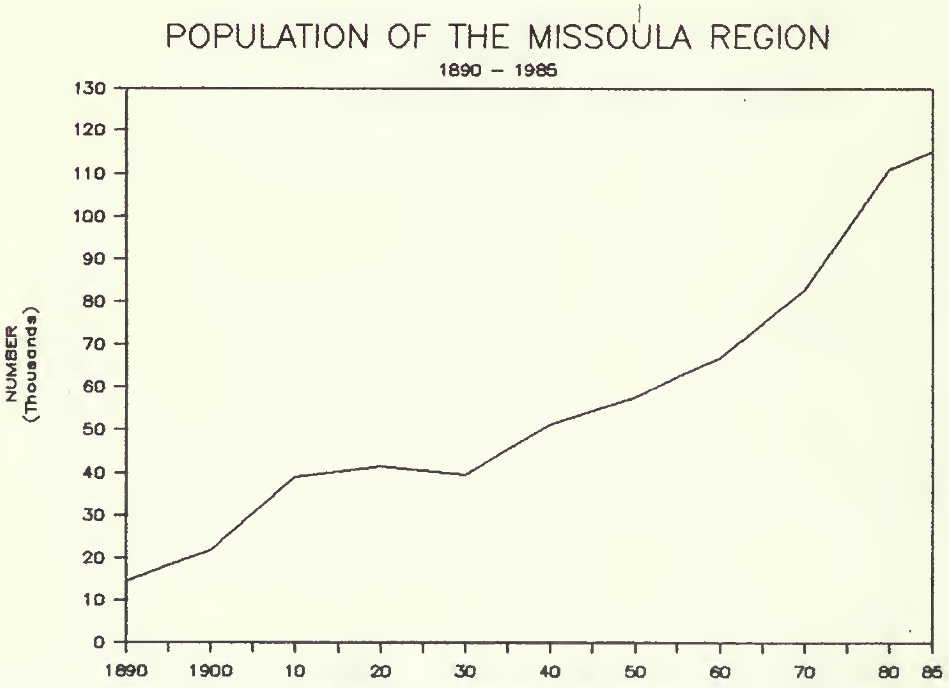
[6] Mara Feeney et al., Social and Economic Effects of Coal Development on the Northern Cheyenne Tribe, (Billings: Bureau of Land Management Montana State Office, May 1986), pp. 4-12 and 4-16. Also personal communication with Feeney and Carlos Villalva, July 24, 1986. Villalva did much of the demographic and labor force analyses for the study.

The Missoula Region

As Table 2.3 and Figure 2.13 indicate, the Missoula region (Mineral, Missoula, Ravalli, and Sanders counties) is characterized by comparatively high growth since 1930, excluding the 1980 through 1985 period. Growth between the 1970 and 1980 censuses was 34 percent, or about 2.5 times the state rate. Estimates in the 1980s, however, put the Missoula region's growth at slightly less than the state's population

Figure 2.13



SOURCE: U.S. BUREAU OF THE CENSUS.

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[7] Feeney, Ibid., pp. 4-17 through 4-25.

growth rate (3.8 percent compared with 5 percent). The region's estimated population of 115,100 in 1985 was third largest of the regions (Table 2.2). The population density of 12.4 was the highest in the state of the twelve regions (Table 2.4).

LABOR FORCE: JOBS AND UNEMPLOYMENT

The following discussion of the labor force in Montana regions focuses on trends in employment from 1969 through 1984 and in unemployment from 1970 through 1985.[8]

Table 2.5 and Figure 2.14 provide an overview of employment change in Montana in the 1969 through 1984 period, while Figure 2.15 shows annual rates of employment change for the state and the regions from 1979 through 1984. Table 2.6 and Figure 2.16 show total employment in Montana and regions from 1969 through 1984.

From Table 2.5 one can see that in the state the number of jobs changed by a total of 35.4 percent in the period 1969 though 1984, or annual average growth of 2.4 percent. The period 1979 through 1984 was characterized by a lower growth rate, only 1.4 percent total, or an annual average of 0.3 percent.

Regions that gained in jobs faster than the state rate over the entire 1969-1984 period were Billings, Bozeman, Helena, Kalispell, Miles City, and Missoula (Table 2.5). Regions with slower growth than the state were, Glasgow-Wolf

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[8] The year 1984 is the last year for which complete information on jobs is available at the county and regional levels.

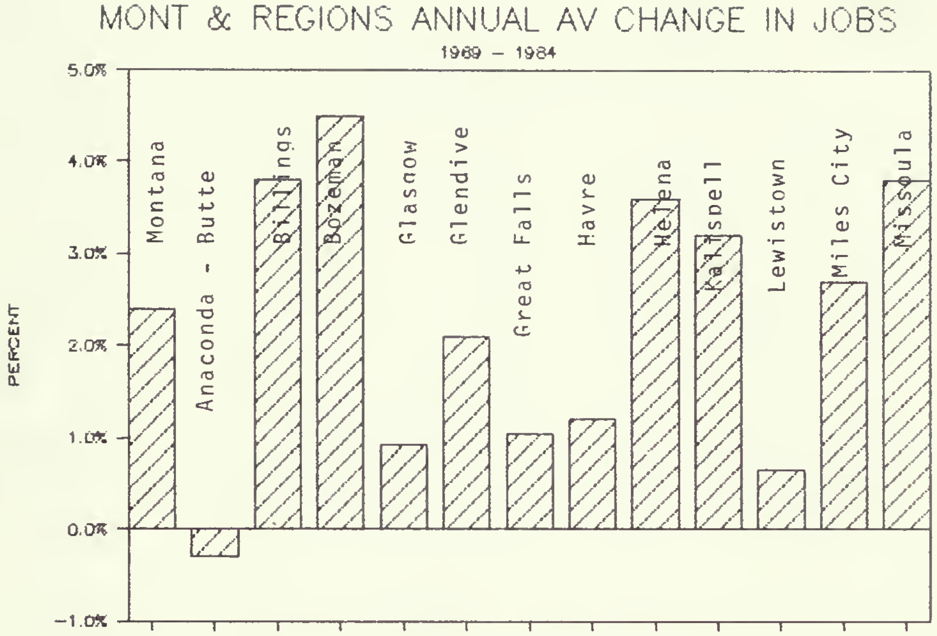
Table 2.5

PERCENT CHANGE IN NUMBER OF JOBS IN MONTANA & REGIONS: 1969 - 1984

Region	1969-1984 % Change	1969-1984 Annual % Change	1979-1984 % Change	1979-1984 Annual % Change
Montana	35.4	2.4	1.4	0.3
Anaconda-Butte Region	-4.4	-0.3	-9.3	-1.9
Billings Region	57.7	3.8	5.2	1.0
Bozeman Region	67.9	4.5	8.9	1.8
Glasgow-Wolf Point Region	12.9	0.9	-1.0	-0.2
Glendive-Sidney Region	31.0	2.1	4.4	0.9
Great Falls Region	14.6	1.0	-4.0	-0.8
Havre Region	18.2	1.2	-5.7	-1.1
Helena Region	53.5	3.6	6.9	1.4
Kalispell Region	48.2	3.2	5.2	1.0
Lewistown Region	9.0	0.6	-4.7	-0.9
Miles City Region	40.2	2.7	8.0	1.6
Missoula Region	57.2	3.8	0.5	0.1

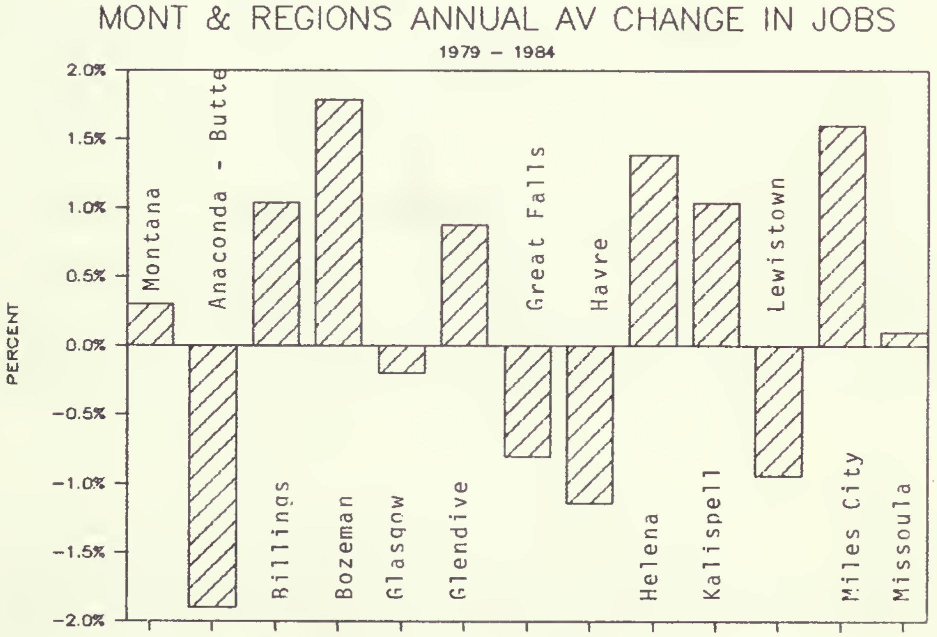
Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Derived from U.S. Bureau of Economic Analysis data.

Figure 2.14



SOURCE: DEA/MT DEPT OF COMMERCE, 1986.

Figure 2.15



SOURCE: DEA/MT DEPT OF COMMERCE, 1986.

Table 2.6

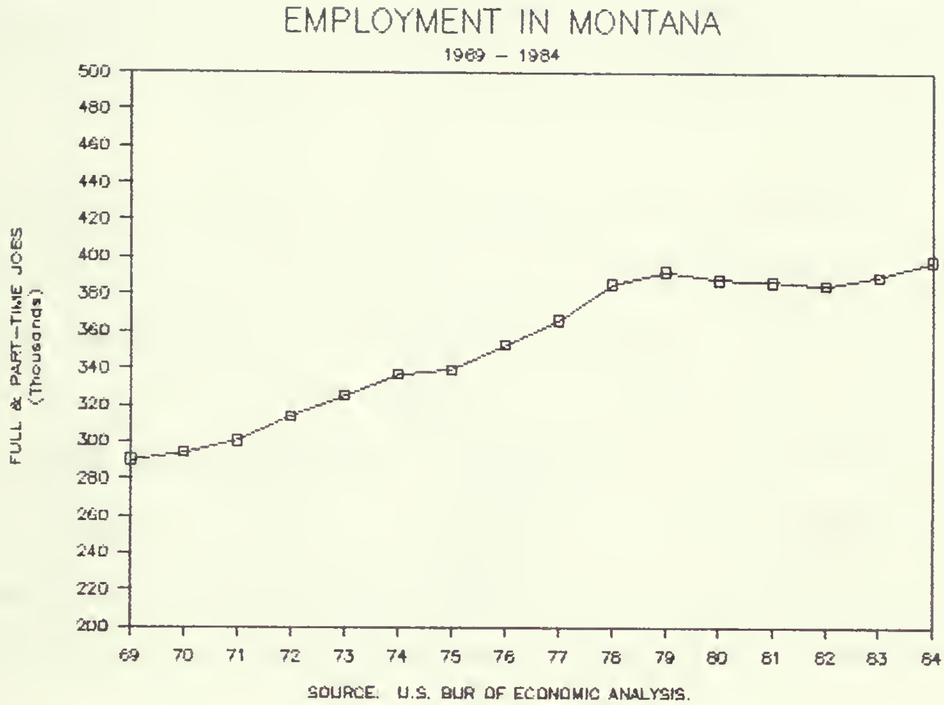
TOTAL JOBS IN MONTANA, REGIONS, AND COUNTIES: 1969 - 1984*

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Montana	289,993	294,051	300,412	313,882	325,000	336,419	339,153	352,480	365,918	385,550	392,533	388,050	386,807	384,783	389,893	398,166
Anaconda-Butte Region	30,111	31,358	30,354	32,024	32,820	34,060	32,890	32,332	32,278	32,835	33,092	31,878	31,723	30,818	30,287	29,993
Beaverhead	3,086	3,043	3,151	3,284	3,258	3,544	3,552	3,556	3,629	3,679	3,861	3,854	3,754	3,910	3,877	4,009
Deer Lodge	5,849	6,259	5,794	5,915	5,807	6,073	5,657	5,467	5,239	4,844	4,794	4,159	3,796	3,481	3,597	3,733
Granite	1,112	1,114	1,060	1,184	1,247	1,275	1,159	1,154	1,129	1,213	1,191	1,192	1,178	1,190	1,209	1,270
Madison	2,178	2,177	2,229	2,290	2,403	2,483	2,347	2,361	2,421	2,479	2,634	2,619	2,590	2,758	2,765	2,773
Powell	2,593	2,580	2,710	2,812	2,853	3,038	3,115	3,012	3,190	3,240	3,280	3,150	3,023	3,134	3,171	3,197
Silver Bow	15,293	16,187	15,390	16,539	17,252	17,647	16,940	16,782	16,670	17,170	17,292	16,902	17,374	16,105	15,468	15,003
Billings Region	48,903	48,440	50,473	53,053	55,763	58,569	59,784	63,283	66,305	70,732	72,819	72,104	72,353	73,351	74,563	76,721
Big Horn	3,498	3,931	3,891	3,780	3,853	4,140	4,208	4,395	4,725	5,182	5,603	5,717	5,135	4,910	4,821	4,604
Carbon	2,907	2,921	2,948	3,076	3,060	3,072	3,076	3,014	3,107	3,217	3,245	3,255	3,295	3,325	3,428	3,492
Stillwater	1,816	1,863	1,895	1,990	1,981	2,060	2,036	2,070	2,085	2,151	2,219	2,218	2,202	2,237	2,282	2,369
Sweet Grass	1,334	1,325	1,422	1,422	1,452	1,494	1,529	1,518	1,495	1,534	1,529	1,485	1,454	1,475	1,460	1,501
Yellowstone	37,268	38,820	40,319	42,777	45,417	47,803	48,895	52,286	54,893	58,648	60,243	59,429	60,267	61,396	62,572	64,495
Bozeman Region	17,939	18,747	19,588	20,849	22,294	23,537	23,474	24,880	26,622	28,337	28,904	28,565	28,770	29,841	30,476	31,478
Gallatin	12,586	13,274	13,970	15,071	16,189	17,290	17,272	18,451	19,949	21,317	21,768	21,747	22,011	22,933	23,831	24,638
Meagher	880	892	895	916	961	1,002	938	941	969	1,056	1,075	1,017	955	970	977	956
Park	4,473	4,581	4,723	4,862	5,146	5,245	5,264	5,488	5,704	5,942	6,081	5,801	5,804	5,758	5,668	5,884
Glasgow-Wolf Point Region	15,955	15,730	15,780	16,328	16,526	17,112	17,181	17,075	16,870	17,405	17,949	17,706	17,974	17,756	17,540	17,761
Daniels	1,550	1,509	1,509	1,491	1,501	1,525	1,532	1,651	1,525	1,601	1,600	1,554	1,602	1,689	1,595	1,580
Phillips	2,150	2,216	2,220	2,238	2,317	2,422	2,427	2,345	2,343	2,487	2,609	2,681	2,618	2,678	2,739	2,824
Roosevelt	4,513	4,309	4,312	4,435	4,495	4,807	4,802	4,912	4,963	5,112	5,540	5,348	5,259	5,484	5,563	5,646
Sheridan	2,617	2,587	2,505	2,533	2,571	2,853	2,850	2,665	2,674	2,841	2,983	3,104	3,334	3,199	3,063	3,074
Valley	5,025	5,109	5,214	5,631	5,642	5,505	5,770	5,602	5,365	5,364	5,217	5,019	5,165	4,726	4,600	4,639
Glendive-Sidney Region	13,607	13,387	13,174	13,595	14,157	14,438	14,400	14,848	15,063	16,075	16,791	17,654	19,178	18,622	17,261	17,533
Dawson	5,338	5,155	5,097	5,297	5,553	5,836	5,560	5,694	5,774	6,090	6,257	6,533	6,911	6,941	6,421	6,291
Garfield	922	909	879	862	878	880	867	823	800	841	870	886	853	901	916	926
McCone	1,462	1,440	1,451	1,492	1,487	1,537	1,561	1,451	1,514	1,478	1,519	1,479	1,456	1,557	1,493	1,470
Prairie	871	843	854	878	881	903	914	928	885	950	987	1,044	913	949	941	946
Richland	4,299	4,397	4,294	4,422	4,628	4,780	4,843	5,178	5,431	5,894	6,449	7,216	8,349	7,590	6,818	7,235
Wibaux	715	823	599	644	730	702	627	672	671	722	709	694	694	684	672	665
Great Falls Region	51,188	51,528	52,115	53,628	54,484	55,733	55,897	58,357	59,812	61,730	61,486	60,343	59,369	58,092	58,454	59,024
Cascade	35,991	36,150	36,528	37,736	38,470	39,027	38,841	40,928	42,164	43,265	42,056	41,610	40,768	39,905	40,292	40,836
Chouteau	3,010	2,895	2,952	2,988	3,008	3,214	3,111	3,024	2,923	2,918	3,013	2,952	2,957	2,965	2,979	2,962
Glacier	4,136	4,191	4,394	4,639	4,789	4,903	5,190	5,372	5,569	5,895	5,941	6,264	5,900	5,627	5,662	5,792
Pondera	2,599	2,837	2,839	2,873	2,734	2,737	2,823	3,040	3,144	3,280	3,339	3,202	3,236	3,203	3,274	3,288
Teton	2,674	2,545	2,531	2,633	2,630	2,778	2,796	2,841	2,897	2,960	2,981	2,972	3,088	3,056	2,960	3,026
Toole	2,778	2,908	2,873	2,761	2,855	3,074	3,118	3,154	3,215	3,420	3,336	3,243	3,420	3,118	3,087	3,120
Havre Region	11,208	11,321	11,361	11,854	12,027	12,371	12,695	13,097	13,356	13,871	14,182	13,729	13,479	13,332	13,298	13,380
Blaine	2,584	2,469	2,642	2,805	2,758	2,805	2,899	3,014	2,984	3,157	3,191	2,992	3,002	2,984	2,998	3,072
Hill	7,477	7,509	7,624	7,929	8,190	8,414	8,610	8,904	9,191	9,479	9,724	9,473	9,259	9,157	9,106	9,116
Liberty	1,147	1,143	1,115	1,120	1,079	1,152	1,186	1,179	1,181	1,235	1,267	1,260	1,218	1,191	1,194	1,192
Helena Region	19,412	19,897	20,609	21,479	22,054	22,598	23,380	25,099	26,736	27,905	28,571	28,775	28,951	29,099	29,780	30,540
Broadwater	1,064	1,081	1,107	1,165	1,219	1,308	1,332	1,340	1,420	1,527	1,624	1,451	1,435	1,437	1,485	1,534
Jefferson	1,892	1,872	1,867	1,902	1,915	1,900	1,945	2,050	2,082	2,138	2,141	2,184	2,253	2,490	2,614	2,712
Lewis & Clark	16,456	16,944	17,635	18,412	18,920	19,392	20,103	21,709	23,234	24,240	24,806	25,140	25,263	25,172	25,681	26,294
Kalispell Region	27,600	27,232	28,513	29,984	31,346	31,398	31,147	32,754	34,592	37,492	38,380	37,224	36,737	36,238	38,410	40,364
Flathead	15,239	15,325	16,281	17,268	18,465	18,916	19,055	20,324	21,708	23,456	24,245	23,684	23,073	22,601	24,111	25,905
Lake	4,887	4,796	5,198	5,634	5,974	5,971	5,791	6,021	6,210	6,738	6,827	6,882	6,719	6,855	7,061	7,244
Lincoln	7,474	7,111	7,034	7,082	6,907	6,511	6,301	6,409	6,674	7,298	7,308	6,658	6,945	6,780	7,218	7,215
Lewistown Region	10,109	10,094	10,115	10,047	10,308	10,710	10,694	10,882	10,981	11,366	11,544	11,309	11,210	11,035	10,936	10,999
Fergus	5,464	5,420	5,438	5,300	5,488	5,770	5,756	5,871	6,043	6,282	6,391	6,226	6,093	5,908	5,933	5,827
Golden Valley	413	421	396	392	404	420	403	408	390	378	394	387	391	380	382	400
Judith Basin	1,200	1,183	1,206	1,228	1,239	1,243	1,226	1,218	1,221	1,237	1,274	1,229	1,200	1,280	1,227	1,251
Musselshell	1,475	1,544	1,604	1,648	1,699	1,764	1,814	1,881	1,820	1,915	1,917	1,938	2,072	2,014	1,935	1,917
Petroleum	368	331	307	317	323	331	328	316	304	306	324	306	288	291	293	290
Wheatland	1,189	1,195	1,164	1,162	1,159	1,162	1,167	1,192	1,193	1,240	1,244	1,225	1,156	1,182	1,166	1,214
Miles City Region	12,726	12,944	12,778	12,989	13,388	14,440	16,084	16,414	15,460	15,969	16,082	17,111	17,819	19,107	18,734	17,592
Carter	1,003	950	948	901	879	889	867	842	824	874	910	914	907	927	899	890
Custer	5,579	5,434	5,523	5,582	5,657	6,109	6,324	6,386	6,684	6,847	6,688	6,987	6,632	6,494	6,412	6,665
Fallon	1,740	1,780	1,744	1,744	1,899	1,850	1,889	1,982	2,014	2,107	2,144	2,211	2,159	2,118	2,024	2,035
Powder River	1,341	1,283	1,247	1,254	1,214	1,310	1,302	1,288	1,305	1,344	1,417	1,438	1,433	1,504	1,455	1,376
Rosebud	2,553	2,500	2,831	3,015	3,410	3,761	5,161	4,409	4,188	4,298	4,416	5,053	6,208	7,579	7,259	6,104
Treasure	510	507	485	493	527	525	539	527	513	499	507	506	480	487	485	494
Missoula Region	33,335	33,555	35,552	37,854	39,831	41,453	41,427	44,459	47,753	51,833	52,513	51,458	49,042	47,873	50,254	52,759
Mineral	1,225	1,153	1,218	1,201	1,433	1,466	1,464	1,512	1,500	1,570	1,622	1,570	1,545	1,397	1,577	1,659
Missoula	24,302	24,607	25,920	27,642	28,989	30,132	30,243	32,744	35,723	39,147	39,627	38,708	36,476	35,688	37,387	39,369
Ravalli	5,081	5,003	5,273	5,675	5,952	6,289	6,110	6,374	6,454	7,144	7,247	7,089	7,153	7,046	7,343	7,604
Sanders	2,727	2,792	3,143	3,338	3,457	3,566	3,610	3,829	3,876	3,972	4,017	4,093	3,868	3,742	3,947	4,127

*Note - Includes both full and part-time jobs. The state totals here are of the latest available county data. Revised statewide information is used in Chapter 1 and Chapter 3.

Source: U.S. Bureau of Economic Analysis. Compiled by the Office of Economic

Figure 2.16



SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Point, Glendive-Sidney, Great Falls, Havre, and Lewistown. The growth rate for the Anaconda-Butte region was negative over this period.

In the 1979 through 1984 period, Anaconda-Butte, Glasgow-Wolf Point, Great Falls, Havre, and Lewistown had negative growth rates. Conversely, the Billings, Bozeman, Glendive-Sidney, Helena, Kalispell, Miles City, and Missoula regions grew at positive rates over this latter period. All of these regions except Missoula grew at more than three times the statewide rate of 1.4 percent.

In general, the employment growth over the 1969 to 1984 period was concentrated in industries that do not produce a physical product, service type sectors. These sectors included private services (principally health, business, and professional services), wholesale/retail trade (the largest growth being in eating and drinking places), banking and real estate, public services (government), and motor freight transportation.

The performance of sectors producing physical goods was more mixed, compared with service and trade industries. The building construction industry increased in employment between 1969 and 1984. Mining increased some, primarily because of an increase in oil and gas employment, along with coal mining. Agricultural employment declined as a result of a long-term phenomenon of substituting physical capital goods (machinery, etc.) for labor. Employment in manufacturing was relatively constant.

Table 2.7 offers information on employment by non-Indians and Indians on the seven Montana reservations, which will be discussed below in the appropriate regions.[9]

A phenomenon that exists within the employment data is that of plant, mine, mill, and railroad closures in recent years.[10] The closures have particularly impacted some regions.

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[9] On Indian employment, only 1980 data are presented, because other consistent and systematic current information is not available.

[10] This, of course, is an international phenomenon that is well delineated by Barry Bluestone and Bennett Harrison in The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry, (New York: Basic Books, Inc., 1982). Plant closure issues specifically related to Montana are covered in an unpublished paper by Dwayne Ward entitled "Plant Closures in Montana," and are discussed based on public information found primarily in news media articles as well as from Montana State AFL-CIO files on

Table 2.7

EMPLOYMENT BY RESIDENTS OF MONTANA INDIAN RESERVATIONS BY INDUSTRY: 1980

Industry	Blackfeet Total	Blackfeet Indian	Crow Total	Crow Indian	Flathead Total	Flathead Indian	Fort Belknap Total	Fort Belknap Indian	Fort Peck Total	Fort Peck Indian	Northern Cheyenne Total	Northern Cheyenne Indian	Rocky Boy's Total	Rocky Boy's Indian	All Reservations Total	All Reservations Indian
Agriculture	301	111	487	69	1,125	92	26	26	816	57	92	33	12	12	2,859	400
Forest & Fisheries	0	0	23	8	93	41	0	0	0	0	52	29	12	0	180	78
Mining	57	45	74	61	12	2	10	10	67	15	36	29	8	8	264	170
Construction	214	197	55	36	553	43	9	9	209	58	51	51	28	22	1,119	416
Manufacturing	97	59	11	11	536	74	3	3	250	122	63	47	13	13	973	329
Transpor. & P.U.	113	34	46	3	502	53	8	8	210	49	52	25	22	22	953	194
Railroads	49	0	0	0	85	0	0	0	21	6	0	0	19	19	174	25
Other	64	34	46	3	417	53	8	8	189	43	52	25	3	3	779	169
Wholesale Trade	28	16	22	11	131	12	6	6	151	16	0	0	5	5	343	66
Retail Trade	288	210	111	31	996	85	76	58	489	70	68	27	17	17	2,045	498
Finance, Insurance, & Real Estate	32	19	26	0	267	3	0	0	72	22	6	6	0	0	403	50
Services	587	370	547	307	1,808	211	315	212	1,048	314	446	276	93	88	4,844	1,778
Education	341	189	265	142	649	32	150	72	386	95	324	200	65	60	2,180	790
Public Admin.	536	502	358	352	791	350	125	120	515	389	262	238	148	142	2,735	2,093
Total	2,253	1,563	1,760	889	6,814	966	578	452	3,827	1,112	1,128	761	358	329	16,718	6,072

Note: Lumber dominated the manufacturing sector of the Flathead and Northern Cheyenne Reservations. Textile products accounted for 102 manufacturing jobs on the Fort Peck Reservation.

Source: U.S. Bureau of the Census, Data from Summary Tape File 4, 1985. Compiled by Office of Economic Analysis, Montana Department of Commerce, December 1985.

The major closures include the railroad industry. These job losses have tended to be more dispersed throughout the state than geographically specific industries. The Milwaukee Road halted its operations in 1980 in bankruptcy at a cost of 750 jobs in the state and Burlington Northern, which now has a rail freight monopoly in most parts of Montana, has decreased its labor force in Montana, with the most recent shutdown (February 1986) being a maintenance facility in Livingston (Park County), at the cost of 360 jobs. In total, the railroad industry lost 3,091 jobs statewide between 1979 and 1985, or 41 percent of railroad jobs.[11] In addition, from 1972 to 1984 about 41 percent of the physical rail system, the tracks, has been removed.[12]

The Anaconda-Butte Region

The Anaconda-Butte region (Figure 2.17) had 30,111 full and part-time jobs in 1969. Jobs increased to 33,052 in 1979 and then decreased to 29,993 jobs in 1984. In 1984 the region was seventh in the state in number of jobs. In the 1969 to 1984 period the region was the only one to have a negative growth rate in jobs. The region was one of five with negative growth rates in jobs in the 1979 to 1984 period.

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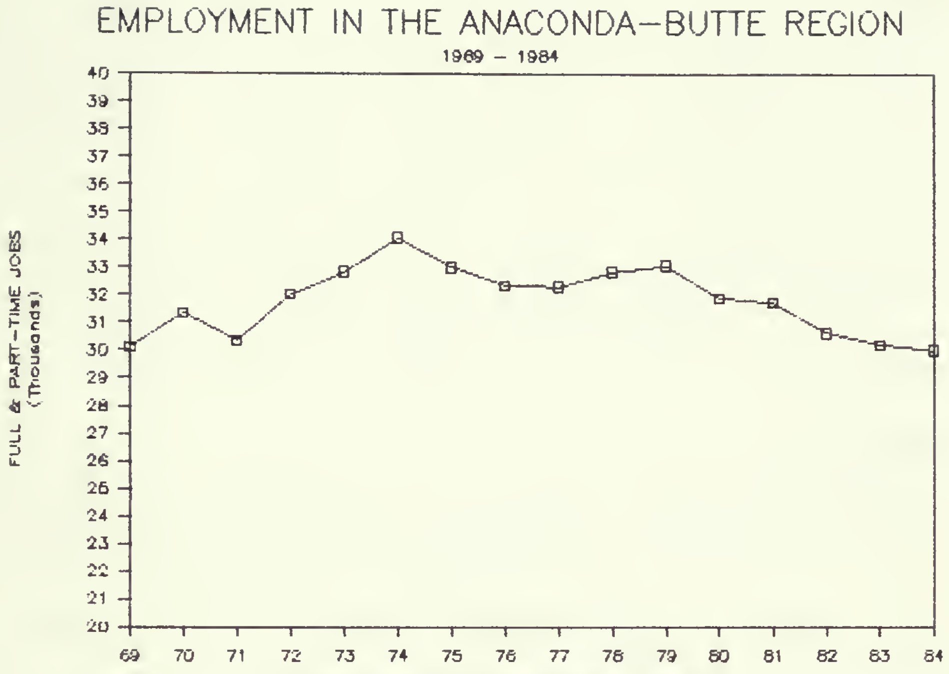
plant closures. Also see the Research and Analysis Bureau, Montana: A Plant Closure Study, (Helena: Montana Department of Labor and Industry, May 1986).

[11] According to unpublished U.S. Bureau of Economic Analysis data.

[12] Dwayne Ward and Bruce Schwartz, The Montana Statistical Abstract, 1984, (Helena: Montana Department of Commerce, 1985), pp. 241 and 242.

Figure 2.17

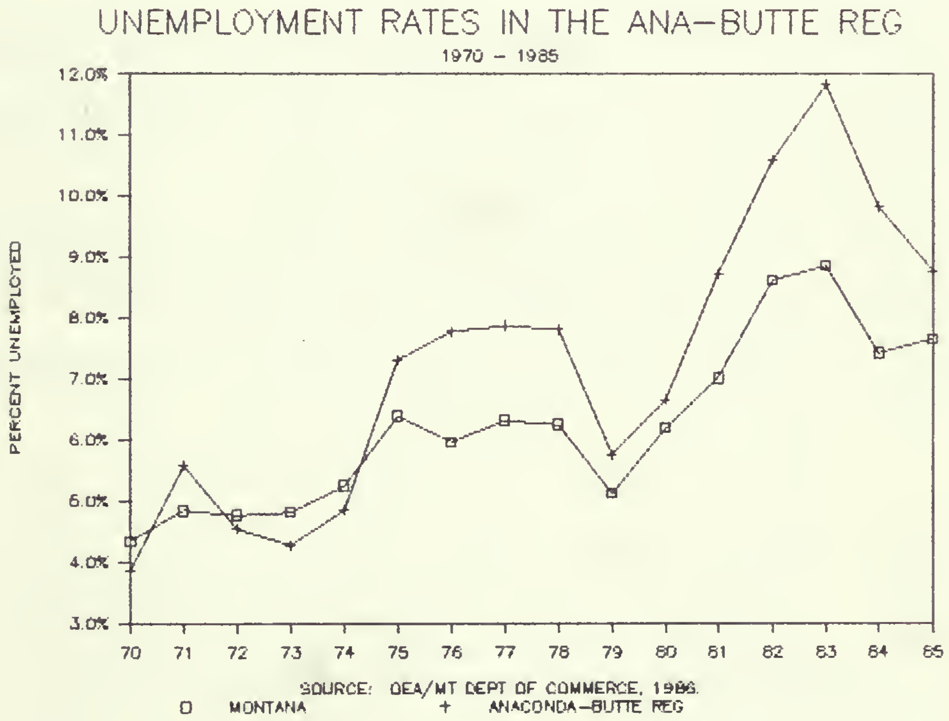


EMPLOYMENT IN THE ANACONDA–BUTTE REGION

1969 – 1984

SOURCE: BEA/MT DEPT OF COMMERCE, 1986.

Figure 2.18



UNEMPLOYMENT RATES IN THE ANA–BUTTE REG

1970 – 1985

SOURCE: BEA/MT DEPT OF COMMERCE, 1986.

CENSUS AND ECONOMIC
INFORMATION CENTER
MONTANA DEPT. OF COMMERCE
HELENA, MT 59620-0401
(406) 444-2896

As Table 2.8 and Figure 2.18 indicate, between 1970 and 1985 the Anaconda-Butte region had unemployment rates that were higher than the state, with the exception of 1970, and 1972-1974. The highest rate of unemployment in the region during this period was 11.8 percent in 1983, however, the rate fell to 8.8 percent in 1985 because the size of the labor force and the number of unemployed both fell. This figure compares with a statewide rate in 1985 of 7.7 percent.

The Billings Region

The Billings region (Table 2.6 and Figure 2.19) has the most jobs of the regions in Montana, with 76,721 in 1984, up from 46,903 in 1969. Total growth in the period was nearly 58 percent, or a 3.8 percent a year average. The growth rate was higher only in the Bozeman region, while the Missoula region experienced similar growth to Billings.

In the 1979 to 1984 period, the region was tied for fourth with the Kalispell region in growth of jobs. Both regions had growth over this period of about 5.2 percent.

The Billings region has had unemployment rates below those of the state for the entire 1970 to 1985 period (Table 2.8 and Figure 2.20). However, rates of joblessness have become much higher in the 1980s than in the 1970s, as is the case statewide. In 1984 and 1985, rates in the Billings region were very nearly as high as in the state, reaching 7.5 percent in 1985.

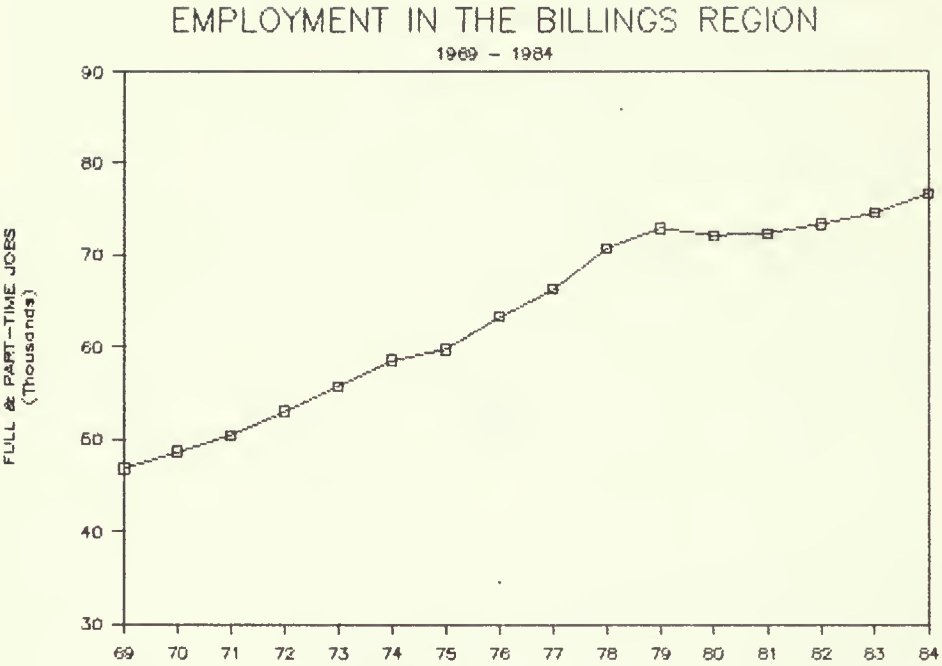
Table 2.7 indicates that there were 1,760 residents of the Crow reservation with jobs in 1980, among whom 889 were native

UNEMPLOYMENT RATES IN MONTANA REGIONS AND COUNTIES: 1970 - 1985

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Montana	4.3%	4.8%	4.6%	4.8%	5.2%	6.4%	6.0%	6.3%	6.3%	5.1%	6.2%	7.0%	8.6%	8.9%	7.4%	7.7%
Anaconda-Butte Region	3.9%	5.6%	4.5%	4.3%	4.9%	7.3%	7.8%	7.9%	7.8%	5.8%	6.7%	6.7%	10.8%	11.0%	9.0%	8.0%
Beaverhead	3.9%	3.8%	3.4%	3.2%	3.8%	5.0%	3.6%	4.0%	4.2%	3.7%	3.8%	4.1%	6.0%	6.5%	5.3%	6.0%
Deer Lodge	2.4%	5.9%	4.3%	3.8%	4.1%	8.5%	8.7%	8.6%	9.7%	7.0%	9.5%	17.1%	15.1%	17.0%	11.9%	10.8%
Granite	6.2%	9.7%	7.1%	8.5%	8.3%	10.9%	9.4%	8.9%	9.2%	7.8%	7.7%	8.9%	11.8%	11.0%	8.5%	13.0%
Madison	5.0%	1.5%	4.7%	4.0%	5.2%	6.9%	6.0%	5.9%	4.4%	3.0%	4.8%	4.8%	7.0%	8.8%	5.5%	4.4%
Powell	4.8%	4.7%	5.1%	4.0%	4.7%	8.5%	7.8%	8.0%	8.7%	5.8%	6.3%	8.3%	10.1%	7.9%	8.8%	7.8%
Silver Bow	3.9%	6.2%	4.8%	4.4%	5.2%	8.1%	9.3%	9.1%	8.8%	8.1%	6.8%	8.3%	11.3%	13.4%	11.8%	9.7%
Billings Region	4.2%	4.5%	4.6%	4.3%	4.5%	5.4%	4.8%	5.0%	5.0%	3.7%	4.8%	5.5%	6.7%	7.8%	7.2%	7.5%
Big Horn	4.6%	6.1%	8.0%	8.8%	7.7%	7.1%	5.9%	7.8%	6.6%	5.0%	6.4%	9.2%	9.1%	8.5%	8.0%	10.3%
Carbon	4.9%	5.1%	6.3%	5.0%	5.0%	6.1%	5.3%	5.5%	6.1%	4.3%	4.4%	4.6%	7.2%	7.4%	7.4%	7.3%
Stillwater	3.8%	5.7%	4.8%	4.2%	3.7%	4.9%	4.7%	5.2%	4.5%	3.3%	3.8%	4.0%	8.5%	11.2%	8.6%	7.6%
Sweet Grass	1.4%	2.0%	2.4%	2.7%	2.5%	3.2%	3.5%	2.8%	2.5%	1.2%	2.1%	3.4%	4.5%	4.7%	5.9%	8.4%
Yellowstone	4.2%	4.4%	4.5%	4.1%	4.2%	5.3%	4.7%	4.8%	4.9%	3.7%	4.8%	5.4%	6.4%	7.8%	7.0%	7.3%
Bozeman Region	3.3%	3.6%	3.9%	3.9%	4.8%	6.5%	5.2%	5.3%	5.1%	4.7%	6.3%	6.1%	7.4%	7.4%	5.6%	5.6%
Gallatin	2.7%	2.9%	3.0%	3.4%	4.3%	6.0%	5.1%	4.8%	4.9%	4.5%	6.2%	5.5%	8.3%	6.4%	4.8%	4.9%
Meagher	3.8%	3.7%	4.8%	6.0%	4.9%	9.7%	8.8%	5.4%	4.8%	3.9%	5.4%	8.5%	9.3%	11.7%	13.1%	9.0%
Park	4.6%	5.7%	6.4%	5.5%	8.0%	7.6%	5.4%	6.6%	5.8%	5.3%	7.1%	8.3%	10.8%	10.6%	7.5%	7.8%
Glasgow-Wolf Point Region	4.3%	4.8%	4.1%	4.9%	4.0%	4.8%	4.7%	6.1%	5.2%	3.9%	4.2%	4.6%	6.9%	8.2%	6.4%	7.1%
Daniels	3.2%	2.6%	4.3%	3.2%	1.7%	1.9%	2.2%	3.0%	3.1%	2.0%	1.8%	2.2%	3.8%	4.4%	4.2%	4.2%
Phillips	4.2%	4.4%	4.2%	4.9%	3.5%	4.8%	4.3%	5.6%	5.2%	3.7%	4.1%	4.8%	7.7%	8.4%	6.9%	9.7%
Roosevelt	5.8%	6.0%	4.8%	6.5%	5.2%	5.4%	4.9%	6.0%	5.5%	4.7%	5.3%	5.8%	7.5%	8.9%	7.0%	7.9%
Sheridan	3.3%	3.9%	3.8%	3.9%	3.0%	3.1%	2.4%	2.8%	2.2%	1.5%	1.8%	1.3%	4.8%	6.6%	4.6%	3.9%
Valley	4.0%	5.0%	3.9%	4.7%	4.3%	5.9%	6.6%	8.8%	7.1%	5.1%	5.4%	6.4%	8.7%	9.7%	6.8%	7.2%
Glendive-Sidney Region	2.9%	3.7%	3.4%	3.5%	3.1%	3.5%	3.3%	3.8%	3.7%	2.7%	3.4%	2.8%	6.7%	9.4%	5.8%	5.6%
Dawson	2.9%	3.7%	3.5%	3.9%	3.1%	3.8%	3.5%	4.5%	4.4%	3.4%	3.0%	3.2%	6.9%	10.0%	5.5%	4.9%
Garfield	1.4%	2.3%	1.9%	1.2%	1.3%	2.7%	2.6%	2.8%	3.3%	4.7%	3.1%	1.9%	2.8%	3.5%	2.7%	2.7%
McCone	1.0%	2.6%	2.6%	2.5%	2.2%	2.2%	2.3%	3.5%	4.7%	1.7%	1.7%	1.9%	3.5%	4.1%	5.1%	5.2%
Prairie	3.0%	4.5%	2.9%	3.1%	2.9%	2.0%	2.4%	2.9%	3.4%	2.7%	2.0%	4.6%	5.1%	8.2%	6.5%	5.1%
Richland	3.6%	4.3%	3.8%	3.8%	3.6%	3.9%	3.8%	3.6%	2.6%	1.9%	4.3%	2.3%	7.8%	10.6%	5.6%	6.6%
Wibaux	3.2%	3.3%	3.5%	4.0%	5.2%	4.4%	2.8%	3.1%	3.0%	3.0%	2.8%	4.0%	9.0%	13.2%	9.3%	7.9%
Great Falls Region	4.0%	4.8%	5.1%	5.4%	5.2%	5.4%	6.1%	6.2%	6.0%	5.7%	6.6%	7.2%	8.0%	8.7%	7.5%	8.0%
Cascade	4.1%	4.9%	5.2%	5.7%	5.5%	6.5%	6.4%	6.3%	7.3%	6.2%	7.3%	8.0%	8.4%	9.0%	7.3%	7.9%
Chouteau	2.1%	2.9%	3.2%	3.3%	2.7%	3.1%	6.3%	3.5%	3.8%	2.2%	2.4%	2.1%	3.8%	4.8%	4.4%	5.9%
Glacier	5.8%	5.2%	4.4%	5.0%	6.7%	8.9%	8.9%	8.6%	9.7%	7.8%	8.5%	12.1%	11.7%	11.3%	12.3%	12.5%
Pondera	3.7%	5.1%	5.6%	5.4%	4.8%	4.3%	4.3%	5.4%	4.3%	3.7%	4.2%	3.3%	5.4%	6.3%	6.8%	6.6%
Teton	2.6%	3.8%	5.2%	5.0%	4.0%	4.7%	4.1%	4.9%	4.3%	3.5%	3.8%	3.3%	5.3%	5.9%	4.8%	5.7%
Toole	4.1%	6.2%	5.7%	4.5%	3.7%	4.3%	4.7%	6.2%	4.1%	4.0%	4.0%	3.5%	6.6%	8.0%	6.6%	7.3%
Havre Region	4.2%	4.4%	4.4%	4.3%	4.2%	4.8%	4.8%	5.3%	5.8%	4.7%	6.2%	6.7%	7.6%	8.1%	7.4%	7.8%
Blaine	5.1%	6.0%	6.9%	5.6%	5.4%	6.0%	5.8%	6.3%	8.5%	6.9%	6.8%	8.8%	9.3%	9.4%	8.0%	8.5%
Hill	4.0%	3.0%	3.5%	4.0%	3.9%	4.6%	4.5%	5.2%	4.7%	4.2%	5.0%	6.4%	7.7%	8.1%	7.1%	7.4%
Liberty	3.3%	3.2%	3.9%	3.4%	2.9%	3.2%	2.3%	3.2%	4.6%	3.2%	3.2%	3.4%	4.5%	4.0%	5.1%	5.7%
Helena Region	3.5%	3.9%	3.9%	4.5%	5.0%	5.4%	5.0%	5.4%	5.7%	4.9%	5.2%	6.0%	7.6%	7.7%	6.5%	6.8%
Broadwater	2.0%	2.7%	3.9%	3.6%	4.3%	6.8%	6.4%	5.0%	4.7%	3.9%	7.1%	7.1%	10.0%	9.7%	7.9%	9.0%
Jefferson	4.4%	4.4%	6.0%	6.9%	6.3%	10.0%	7.6%	7.9%	7.9%	7.4%	6.5%	7.5%	10.4%	11.2%	6.1%	6.2%
Lewis & Clark	3.4%	3.9%	3.7%	4.3%	4.7%	4.8%	4.8%	5.0%	5.8%	4.8%	5.0%	5.8%	7.2%	7.2%	6.5%	6.8%
Kalispell Region	7.5%	7.4%	7.2%	7.1%	9.2%	10.6%	9.5%	9.1%	8.5%	7.2%	9.4%	10.8%	13.4%	10.6%	8.7%	9.0%
Flathead	7.0%	6.9%	7.2%	7.0%	9.3%	10.2%	9.1%	8.7%	7.9%	6.6%	8.3%	10.1%	12.9%	10.5%	7.7%	8.5%
Lake	6.7%	6.4%	5.6%	5.4%	6.4%	8.1%	7.1%	6.8%	6.8%	8.0%	7.4%	7.9%	9.6%	8.3%	7.8%	8.1%
Lincoln	8.9%	9.1%	9.0%	9.2%	12.1%	14.3%	13.1%	12.8%	12.3%	10.3%	15.4%	15.0%	19.4%	13.4%	12.8%	12.1%
Lewistown Region	3.7%	4.2%	4.9%	4.3%	4.5%	5.1%	4.5%	5.6%	5.3%	3.6%	4.4%	4.3%	7.8%	8.0%	6.9%	7.4%
Fergus	3.7%	3.9%	4.4%	4.5%	4.9%	5.2%	4.9%	5.4%	4.8%	3.4%	4.6%	5.2%	7.8%	7.4%	7.0%	8.1%
Golden Valley	5.4%	6.3%	7.8%	5.5%	5.2%	8.3%	5.4%	7.7%	4.5%	4.2%	4.3%	3.4%	8.0%	9.4%	7.7%	7.1%
Judith Basin	2.0%	3.2%	3.9%	3.4%	3.9%	5.1%	3.4%	4.1%	10.2%	8.1%	7.0%	2.8%	5.9%	7.8%	6.6%	6.0%
Musselshell	5.0%	5.0%	5.0%	3.3%	3.8%	5.5%	5.2%	7.6%	4.7%	2.6%	2.3%	2.9%	8.9%	9.8%	7.2%	7.3%
Petroleum	2.9%	5.4%	5.7%	4.8%	2.2%	4.0%	1.7%	2.0%	1.9%	1.5%	3.5%	2.9%	3.9%	6.8%	6.0%	4.5%
Wheatland	3.2%	3.9%	6.5%	4.9%	5.0%	3.1%	3.6%	4.3%	4.5%	2.3%	3.7%	4.3%	7.2%	7.8%	6.3%	5.7%
Miles City Region	2.9%	3.2%	3.4%	3.2%	3.3%	3.5%	4.0%	4.9%	5.0%	3.9%	4.2%	4.8%	5.6%	7.3%	7.7%	7.2%
Carter	3.3%	1.9%	1.9%	2.0%	2.7%	2.9%	1.6%	3.1%	6.4%	7.0%	6.0%	1.6%	3.5%	5.5%	3.3%	2.3%
Custer	3.2%	3.9%	4.3%	3.6%	3.5%	4.2%	3.6%	5.0%	4.7%	3.4%	3.6%	4.9%	8.2%	6.2%	5.4%	5.8%
Fallon	2.8%	3.0%	3.0%	2.5%	2.6%	2.7%	2.6%	2.5%	3.5%	2.1%	2.1%	2.2%	3.9%	5.0%	4.7%	6.0%
Powder River	1.4%	1.9%	2.2%	2.4%	2.0%	2.5%	2.5%	3.2%	3.0%	2.0%	2.6%	2.1%	3.2%	6.2%	4.2%	2.4%
Rosebud	3.1%	3.0%	3.2%	3.2%	3.6%	3.3%	5.7%	6.0%	8.1%	5.0%	5.7%	7.0%	6.4%	9.2%	12.7%	11.7%
Treasure	3.2%	3.2%	2.5%	2.3%	5.5%	5.8%	4.6%	5.7%	4.2%	3.2%	3.5%	2.7%	5.2%	7.3%	6.9%	5.1%
Missoula Region	5.2%	4.9%	5.0%	5.4%	6.5%	8.1%	7.4%	7.9%	7.3%	6.7%	8.3%	9.9%	11.2%	9.8%	7.8%	8.4%
Mineral	8.2%	6.3%	8.7%	7.5%	9.6%	11.1%	8.6%	10.4%	8.8%	7.5%	10.2%	12.6%	22.5%	15.3%	12.0%	14.0%
Missoula	4.7%	4.3%	4.5%	5.1%	6.0%	7.4%	6.7%	7.2%	6.9%	6.4%	7.8%	9.2%	9.2%	8.0%	8.4%	7.1%
Ravalli	6.7%	6.8%	6.8%	6.2%	7.5%	10.4%	9.8%	9.7%	8.4%	7.6%	10.3%	11.1%	14.8%	13.3%	10.5%	10.1%
Sanders	6.0%	5.5%	5.2%	5.0%	6.8%	8.7%	7.4%	8.5%	8.3%	7.9%	9.7%	11.5%	18.0%	12.8%	12.4%	16.3%

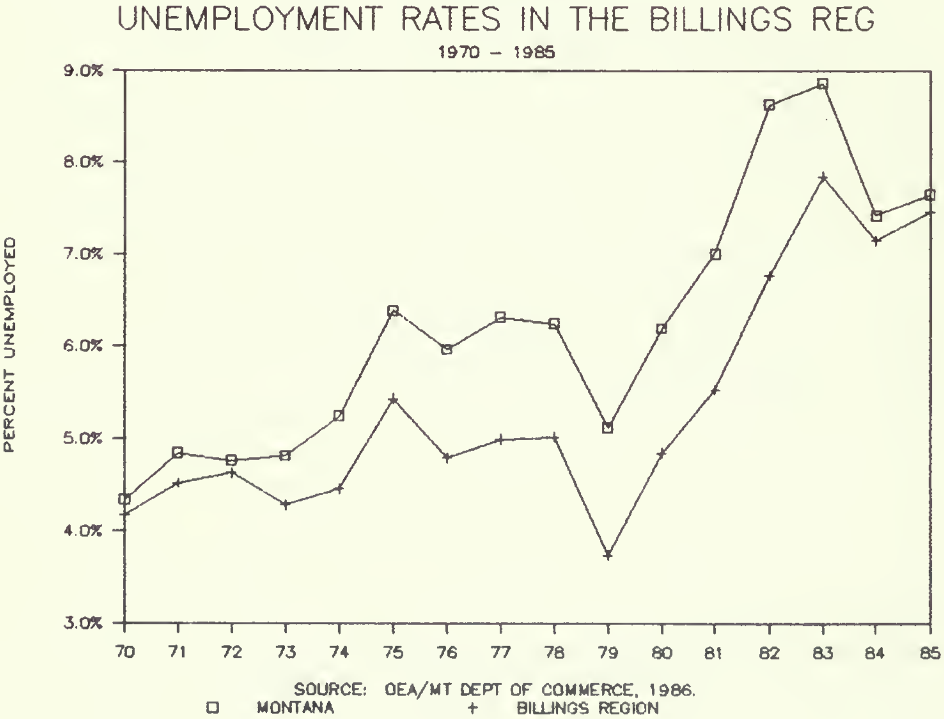
Source: Research and Analysis Bureau, Montana Department of Labor and Industry.
Arranged and regional unemployment rates by Office of Economic Analysis,
Montana Department of Commerce, 1986.

Figure 2.19



SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Figure 2.20



SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

people. As is true statewide on the seven Indian reservations, most jobs were in service type industries, including public services.

Unemployment data for Indian reservations comparable to that for the state, counties, and Montana regions are not available, except from the decennial censuses of population. For Indian people on the Crow Reservation, the U.S. Bureau of the Census reported a 35.2 percent unemployment rate in the 1980 census, compared with a state rate of 8.3 percent rate using the same methodology, which does not include "discouraged workers" in the unemployment data.[13] In addition, there is some evidence that Census unemployment rates on the Crow and all the other Indian reservations in the state underestimate actual unemployment patterns because of under-reporting related to language and cultural differences.

The Bozeman Region

The Bozeman region grew from 17,939 to 31,478 jobs between 1969 and 1984 (Table 2.6 and Figure 2.21). The growth rate was 67.9 percent, the highest in the state between 1969 and 1984. The 1979 to 1984 growth of 8.9 percent was also the highest in the state. The center piece of the Bozeman economy is Montana State University.

Unemployment in the Bozeman region (Table 2.8 and Figure 2.22) tended to be less than in the state in the 1970 to 1985

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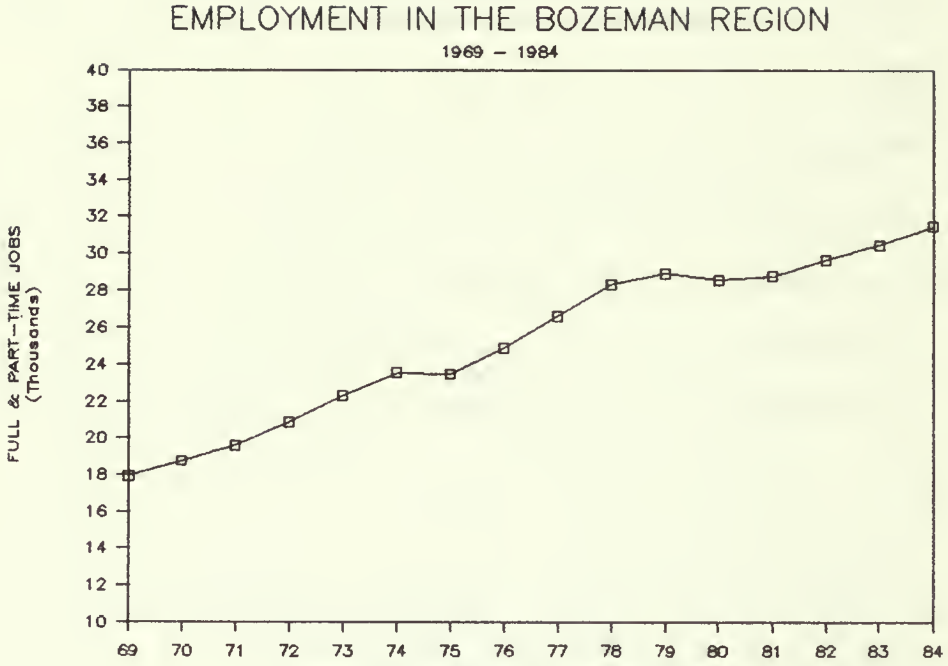
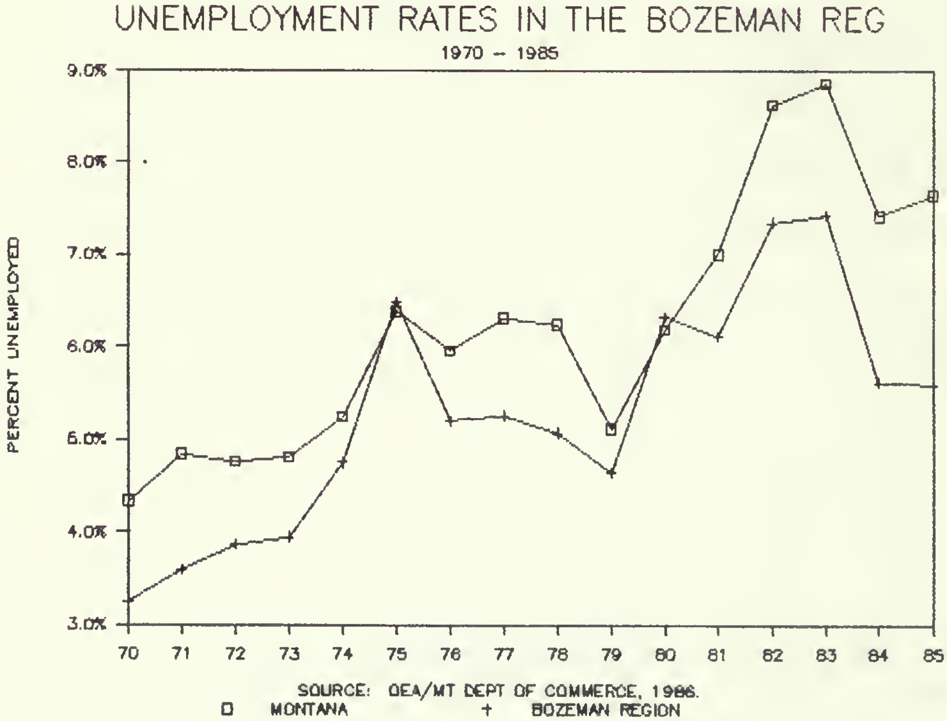
[13] Discouraged workers are those who want a job but are simply too discouraged to look for a job because they think there are no jobs to be found. The result is that discouraged workers are not counted in the labor force or in the unemployment statistics.

Figure 2.21



SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Figure 2.22



SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

period except for 1975 and 1980. These two years coincided with national recessions. Average annual unemployment in Bozeman in 1985 was 5.6 percent, much less than the statewide average of 7.7 percent.

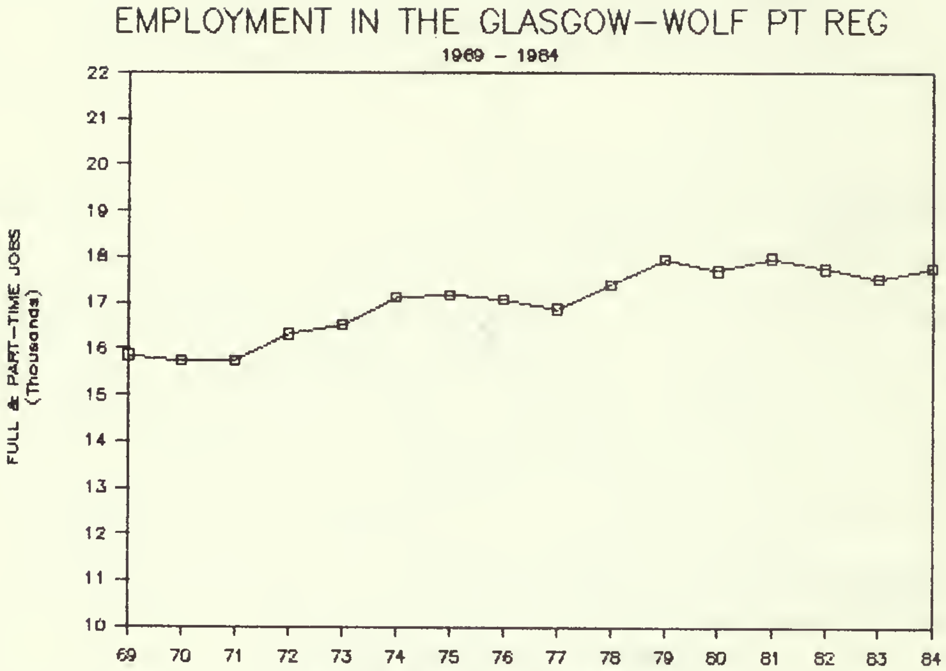
The Glasgow-Wolf Point Region

The Glasgow-Wolf Point region (Table 2.6 and Figure 2.23) grew from 15,855 to 17,761 and was eighth highest in number of jobs among the regions. Growth of 12.9 percent was second from the lowest in the 1969 to 1984 period. The number of jobs in the region declined by one percent between 1979 and 1984. This region ranked eighth in job creation in the 1979 to 1984 period.

As a region, there has been less unemployment than in the state for most years since 1970 (Table 2.8 and Figure 2.24). However, unlike the state, the region experienced a slightly higher rate of unemployment in 1985, 7.1 percent, than there was in the region at the bottom of the national recession in 1982.

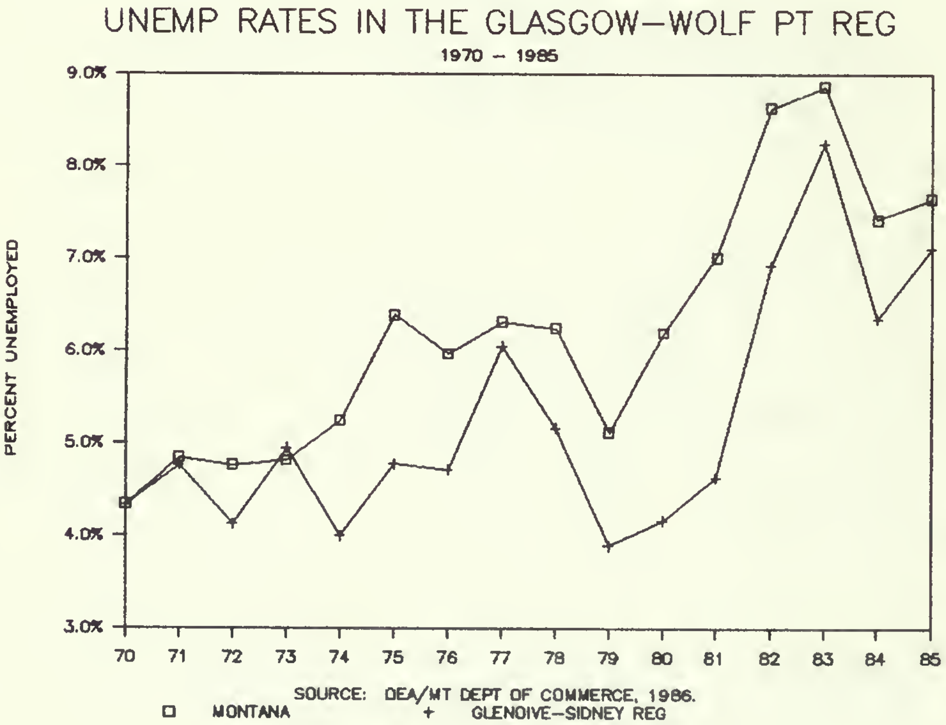
As Table 2.7 indicates, in 1980 there were 3,827 jobs held by residents of the Fort Peck Reservation. Most jobs were in service type industries. In addition, a manufacturing plant is run by Assiniboine and Sioux (A & S) Tribal Industries, which has been successful in obtaining U.S. Department of Defense contracts to manufacture camouflage netting and other products. The unemployment rate among Indian people on the Fort Peck Reservation in 1980 was over 25 percent.

Figure 2.23



SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

Figure 2.24



SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

The Glendive-Sidney Region

The Glendive-Sidney region had 13,607 jobs in 1969 and 17,533 jobs in 1984, a growth of 31 percent (Table 2.6 and Figure 2.25). It was seventh in growth for the 1969-1984 time period. In 1984 the region was the tenth largest employer of the 12 regions. In the 1979 to 1984 period growth was 4.4 percent and only five regions did better.

The region was characterized by low unemployment from 1970 through 1981. The rate more than doubled in 1982, and increased further in 1983, to a peak of 9.4 percent (Figure 2.26). In 1985 the unemployment rate was 5.6 percent in the Glendive-Sidney region.

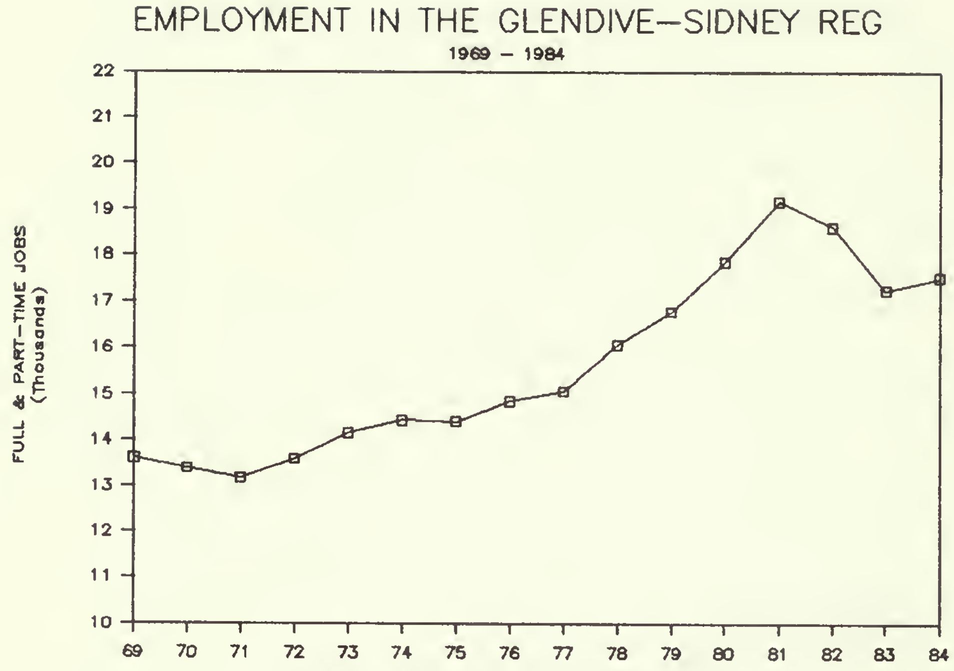
The Great Falls Region

The Great Falls region had the second largest number of jobs in 1984, 59,024 (Table 2.6). Over the entire 1969-1984 period, growth was 14.6 percent, which was the fourth lowest of the regions (Figure 2.27 and Table 2.5). In the 1979 to 1984 period the region lost 4 percent of its jobs.

Unemployment patterns in the region (Table 2.8 and Figure 2.28) were very similar to statewide patterns. For the state, unemployment rates reached a 1975 high of 6.4 percent, falling to 5.1 percent by the 1979 peak in the Montana economy, and then amounting to 7 percent or greater since 1981. In 1985 the Great Falls region had 8 percent unemployment, somewhat above the statewide rate of 7.7 percent.

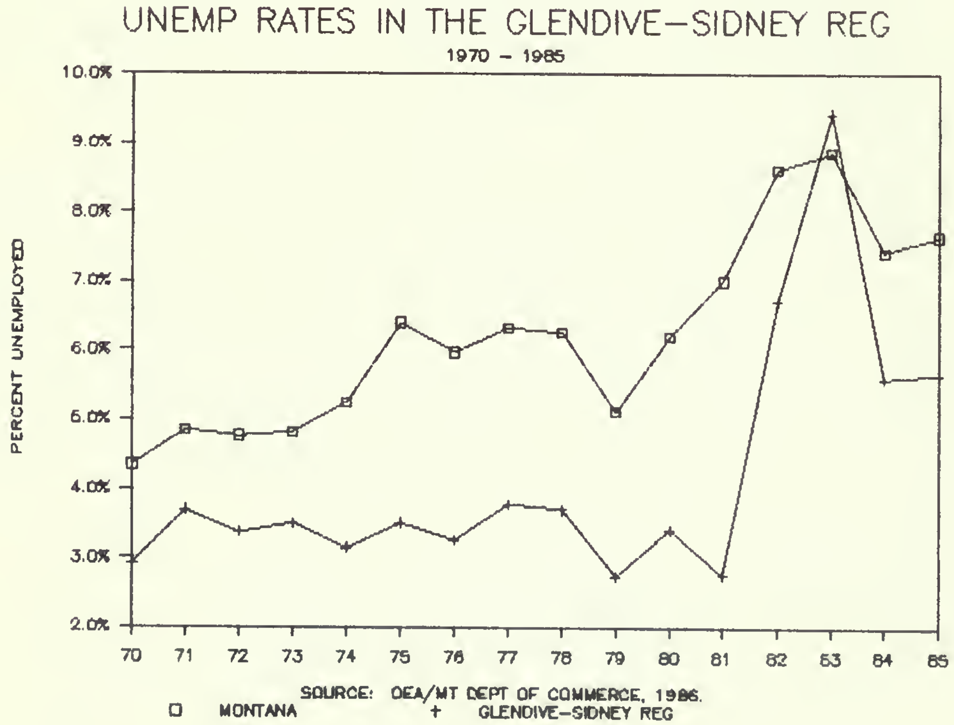
Residents of the Blackfeet Reservation in the region, as Table 2.7 shows, held 2,253 jobs, of which 1,563 were by native

Figure 2.25



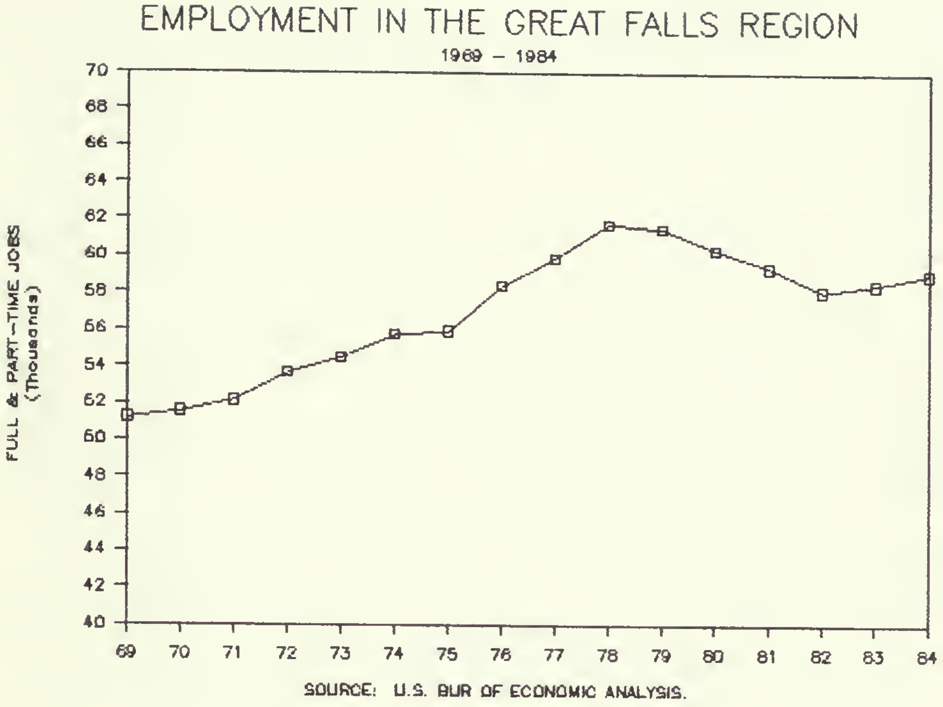
SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

Figure 2.26



SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

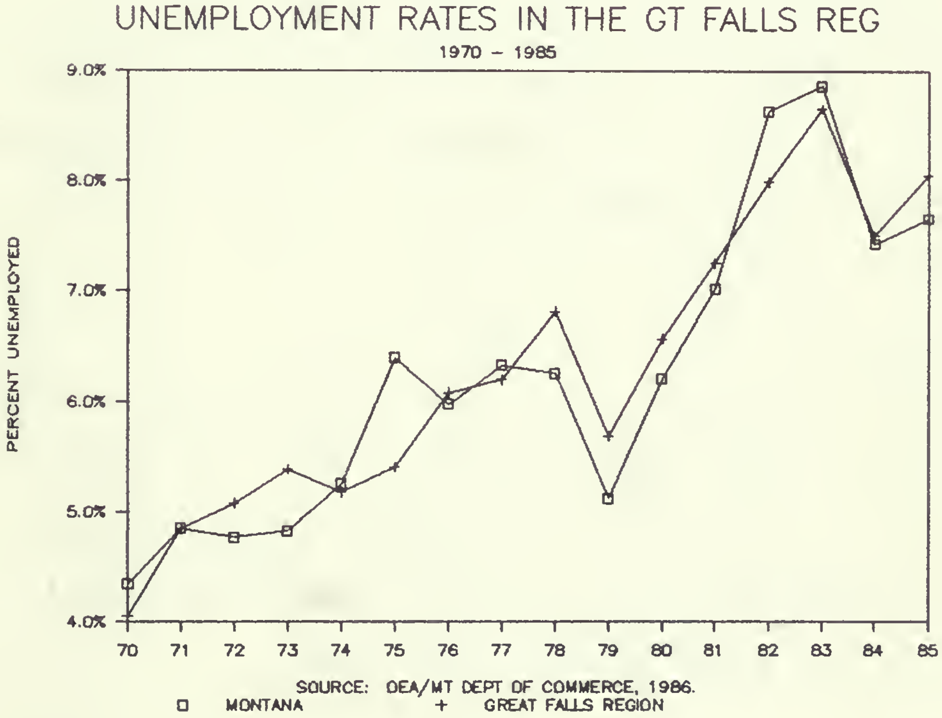
Figure 2.27


EMPLOYMENT IN THE GREAT FALLS REGION

1969 – 1984

SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Figure 2.28


UNEMPLOYMENT RATES IN THE GT FALLS REG

1970 – 1985

SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

people. A pattern of service type employment applied to this area, while the Blackfeet Indian Writing Company dominated the manufacturing sector. Blackfeet unemployment in 1980, according to the U.S. Census Bureau, was 14.7 percent.

The Havre Region

Havre had the second smallest number of jobs among the regions, at 13,380 in 1984 (Table 2.6 and Figure 2.29). The growth rate was 18.2 percent over the entire 1969-1984 period (eighth highest), while there was a decline in jobs by 5.7 percent between 1979 and 1984. The latter was the largest percentage decline outside the Anaconda-Butte region.

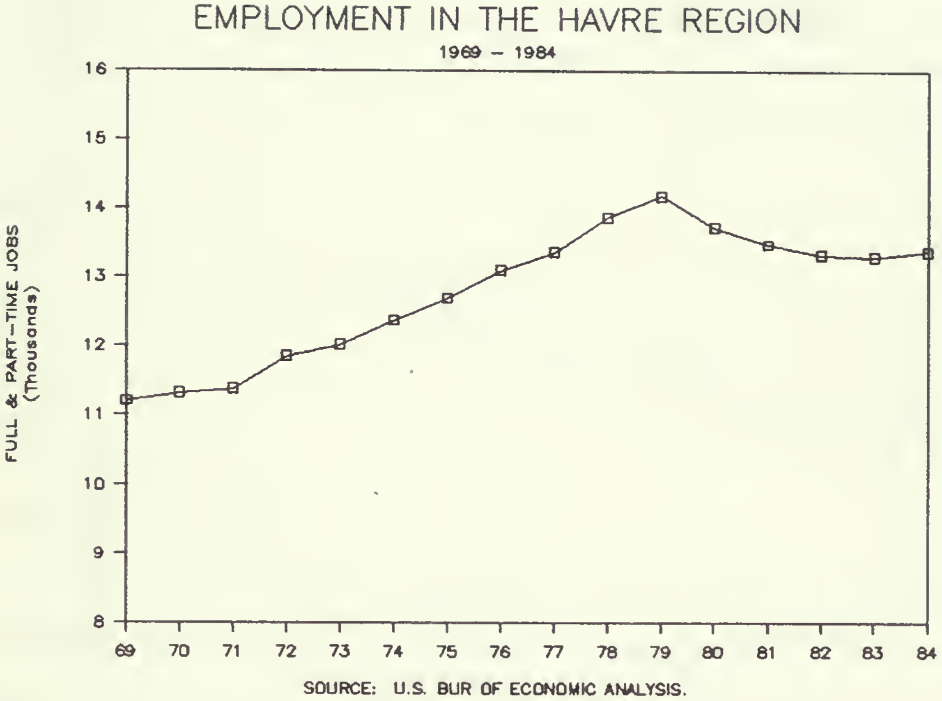
The Havre region had unemployment rates generally less than the state from 1970 to 1985, with rates equal to the statewide rate in 1980 and 1984 (Table 2.8 and Figure 2.30).

As noted previously, the region contains most of two Indian reservations. There were 578 and 358 jobs held by residents of the Fort Belknap and Rocky Boy's reservations, respectively, in 1980. The 1980 Census unemployment rates were 8.9 percent for native people on the Fort Belknap and 11.3 percent on the Rocky Boys reservation.

The Helena Region

The Helena region had the sixth largest number of jobs in 1984, at 30,540 (Table 2.6 and Figure 2.31). The growth rate between 1969 and 1984 was 53.5 percent, or fourth highest in the state. Growth was third highest in the 1979 to 1984 period, at 6.9 percent.

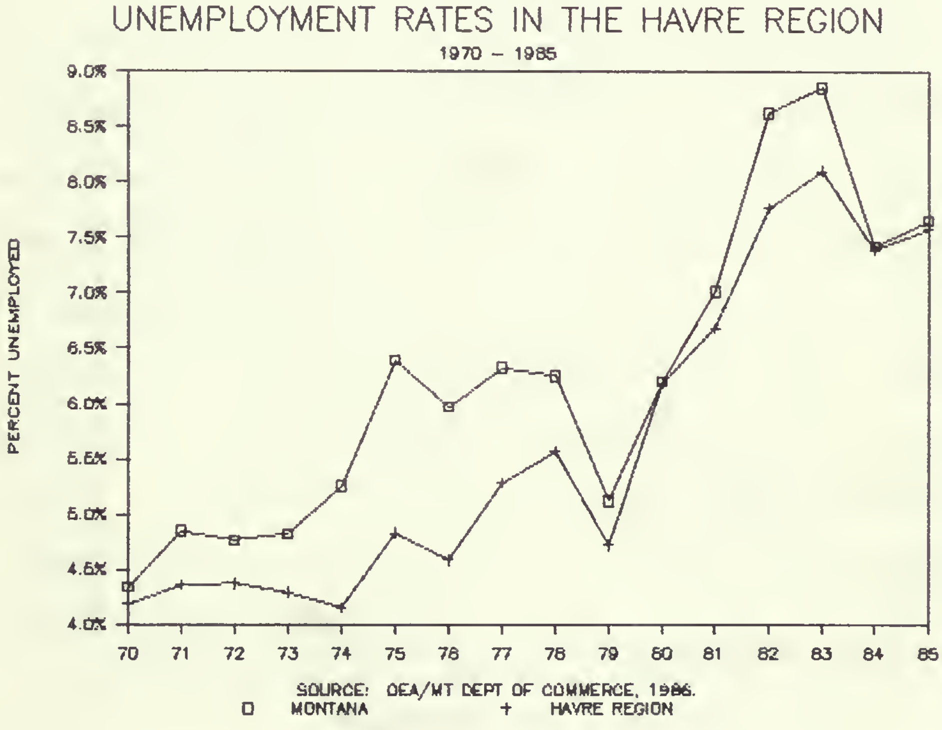
Figure 2.29


EMPLOYMENT IN THE HAVRE REGION

1969 – 1984

SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Figure 2.30


UNEMPLOYMENT RATES IN THE HAVRE REGION

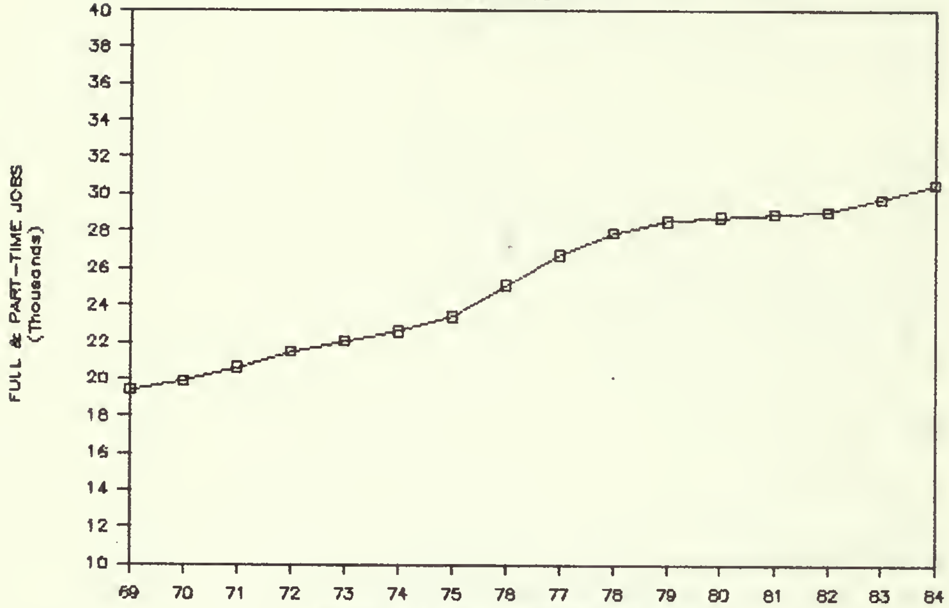
1970 – 1985

SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

Figure 2.31

EMPLOYMENT IN THE HELENA REGION

1969 – 1984

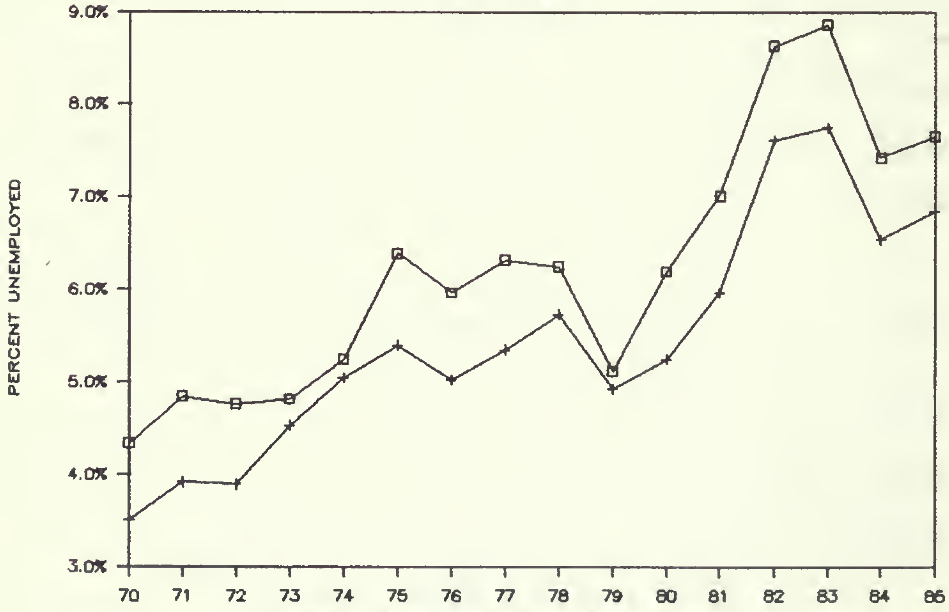


SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Figure 2.32

UNEMPLOYMENT RATES IN THE HELENA REGION

1970 – 1985



SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

□ MONTANA + HELENA REGION

Helena, the seat of state government, dominated the employment data in the region. In addition to state government, the Helena area economy contains important service type sectors, including Mountain Bell and the many membership organizations located there, and some manufacturing (including the ASARCO smelter in East Helena).

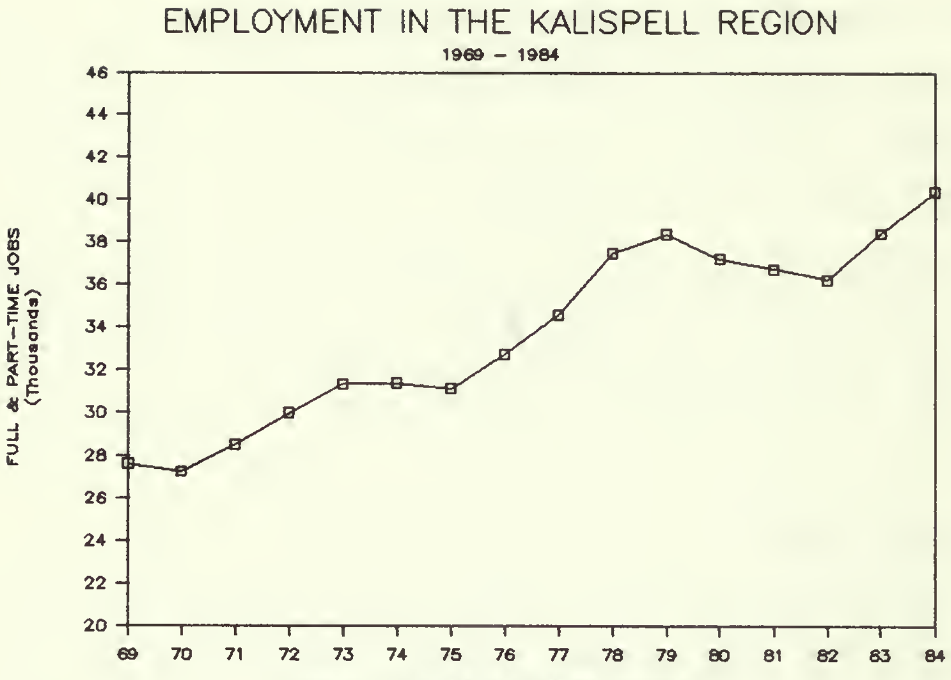
The Helena region enjoyed a comparatively low unemployment economy in the 1970s, at under 5 percent except for 1975 and 1978 (Table 2.8 and Figure 2.32). In 1985 the rate was 6.8 percent.

The Kalispell Region

The Kalispell region has been characterized by growth in employment in the 1969 to 1984 period, at 48.2 percent (Table 2.6 and Figure 2.33). In 1984 there were 40,364 jobs in the region. Growth in the 1979 to 1984 period was a total of 5.2 percent, which tied for fourth place in growth among all the regions.

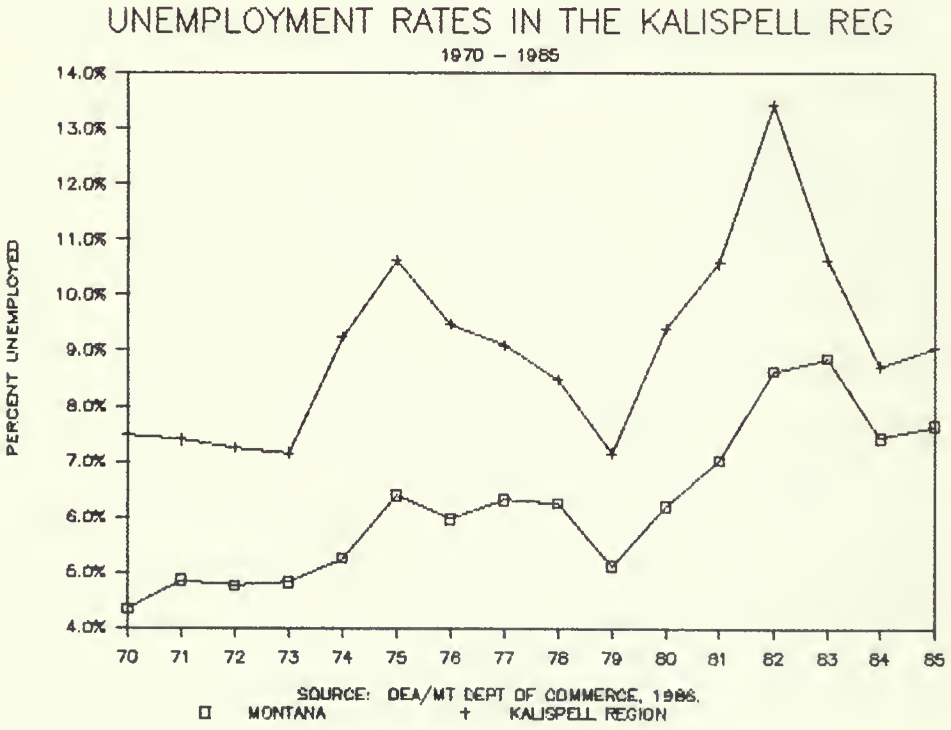
The unemployment rate in the region (Figure 2.34) has tended to be substantially higher than the state rate throughout the period examined mainly because of the volatility of the wood products industry. The region had the highest unemployment rates of all the regions, with levels greater than 10 percent for four years of the period. In 1985, the rate was 9 percent. Lincoln County in particular has experienced very high unemployment rates, primarily because of the cyclical behavior of the wood products industry.

Figure 2.33



SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Figure 2.34



SOURCE: DEA/MT DEPT OF COMMERCE, 1986.

In 1980, about 6,800 residents of the Flathead reservation were employed. The major employing industries were services (including education), agriculture, retail trade, public administration, construction, manufacturing (mainly wood products), and wholesale trade, in that order (Table 2.7). The 1980 Census Bureau's estimated unemployment rate on the Flathead Reservation was 20.2 percent.

The Lewistown Region

Employment in the Lewistown region increased in the 1970s and was at 10,999 in 1984 (Table 2.6 and Figure 2.35). In the 1979 to 1984 period, however, there was a decline in jobs of 4.7 percent, third worst among the regions.

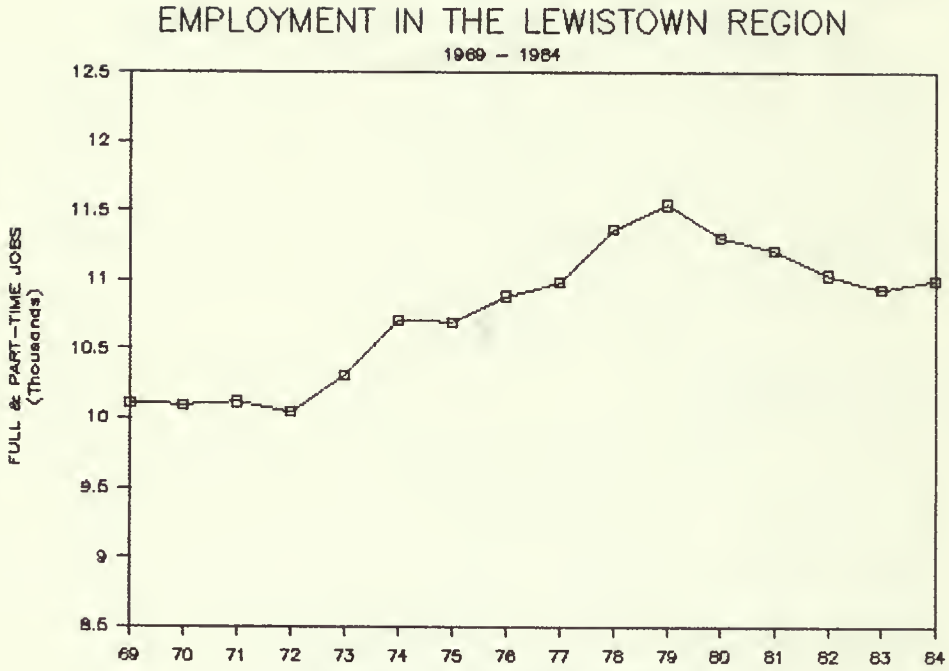
The unemployment rate in the region (Table 2.8 and Figure 2.36) was relatively low until 1981 and then rose dramatically. In 1985, the unemployment rate in the region was 7.4 percent as compared with the statewide average of 7.7 percent.

The Miles City Region

The number of jobs in the Miles City region grew by 40.2 percent in the 1969 to 1984 period, and numbered 17,592 in 1984 (Table 2.6 and Figure 2.37). It was the ninth largest employer of all Montana regions, and the region had the second highest growth rate in jobs in the 1979 to 1984 period, at 8 percent.

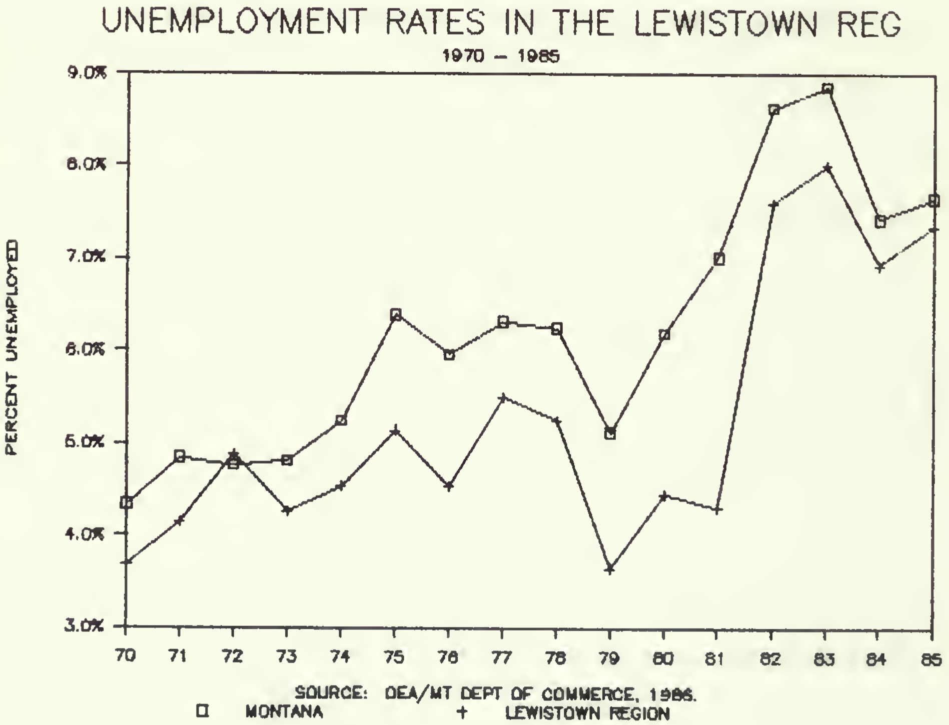
The information on jobs is influenced a great deal by energy development in the region, particularly by coal mining and electricity generation in the Colstrip area, in Rosebud County. The number of jobs grew from 1969 to 1975, but declined in 1976 and 1977, then peaked in this period in 1982

Figure 2.35



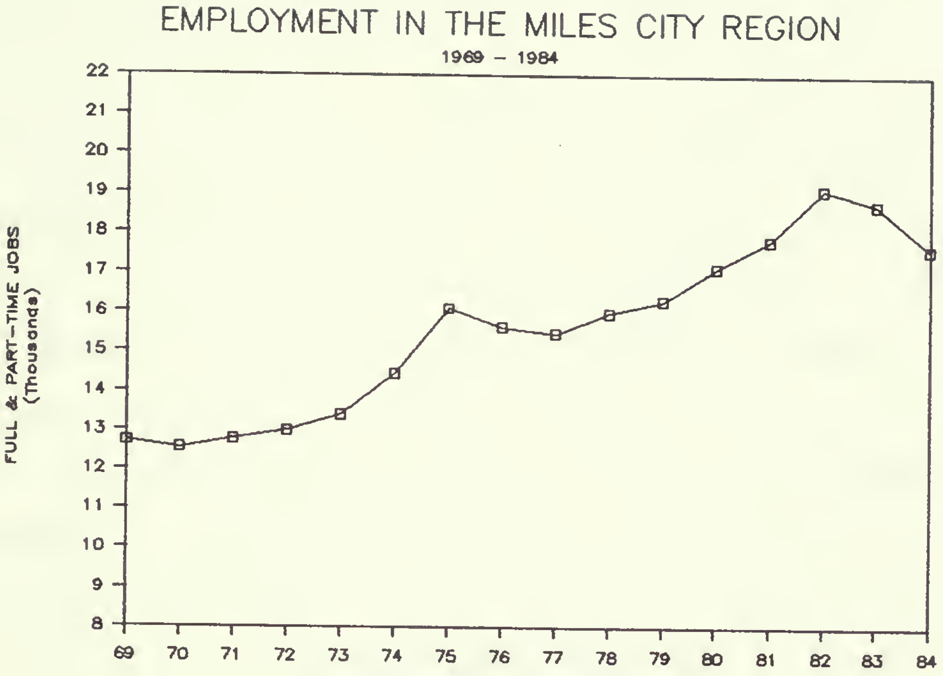
SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Figure 2.36



SOURCE: DEA/MT DEPT OF COMMERCE, 1986.

Figure 2.37

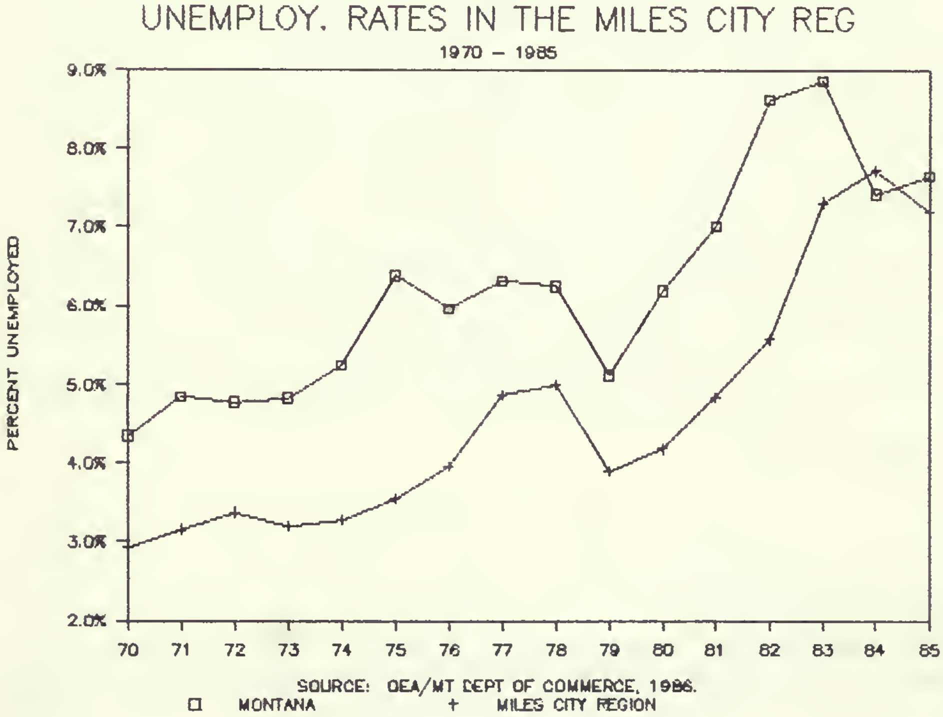


EMPLOYMENT IN THE MILES CITY REGION

1969 – 1984

SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Figure 2.38



UNEMPLOY. RATES IN THE MILES CITY REG

1970 – 1985

SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

at 19,107 jobs. Employment declined in 1983 and 1984 compared to the 1982 peak. The peaks are the result of construction cycles on the four Colstrip electrical generating units, and related coal mining.

In 1980, employment by residents of the Northern Cheyenne reservation was mostly in education, public administration, and other services (Table 2.7). Jobs were also held in agriculture, retail trade, wood products, forestry and fisheries, construction, transportation, and mining, in that order of importance.

The region tended to have lower unemployment rates than the state from 1970 through 1985, except 1984. The latter year presumably was high due to unemployment in Rosebud County after construction of Colstrip electricity generating units 3 and 4 wound down (Table 2.8 and Figure 2.38).

The 1980 Census reported unemployment for the Northern Cheyenne Reservation at 15.7 percent, or about twice as high as the equivalent Montana statewide rate of 8.3 percent. A very recent study done for the U.S. Bureau of Land Management estimated the Northern Cheyenne unemployment rate at 50.2 percent in 1985.[14] This very high rate is indicative of the long-term employment problems facing residents of the Northern Cheyenne Reservation.

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[14] Mara Feeney et al., op.cit. The study offers unemployment rates for the years 1970 through 1985 based on all available sources, including tribal and U.S. Bureau of Indian Affairs data.

The Missoula Region

The Missoula region had the third most jobs of the state's regions in 1984, at 52,759 (Table 2.6 and Figure 2.39). Growth was 57.2 percent in the 1969 to 1984 period (third highest in the state), but only 0.5 percent between 1979 and 1984.

A large portion of the state's forest products industry is concentrated in the Missoula region. Missoula also is the home of the University of Montana and a diversified service and retail trade economy.

The unemployment rate in the Missoula region has tended to be greater than the state rate (Table 2.8 and Figure 2.40). This is in part due to the seasonality and general volatility of the wood products industry. In 1985 unemployment was 8.4 percent.

INCOME IN THE REGIONS

Several income variables were compiled and examined for this study: total personal income, per capita income, nonfarm earnings, farm earnings, property income, transfer payments, and the incidence of poverty. All income information except for poverty was for 1959, 1969, and 1979 through 1985. The poverty data used was for 1969 and 1979.[15]

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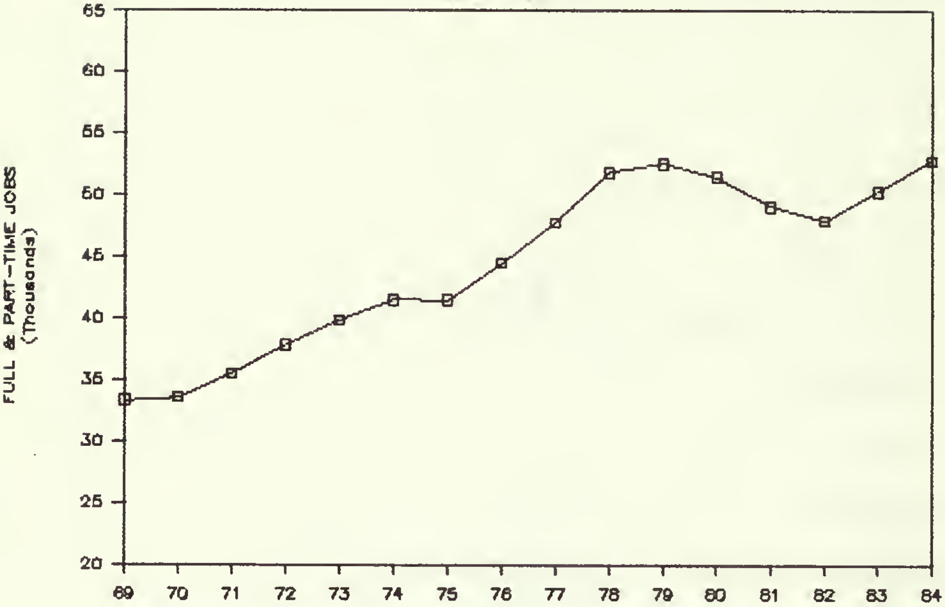
[15] Income data in this chapter is from an April, 1986 release of the U.S. Bureau of Economic Analysis, while that for the state in Chapter 1 is from an August 1986 release. Between April and August the data were revised at the state level. These revisions are not yet available for counties. Only decennial census data on poverty is currently available in Montana at the county level, which was used to construct regional data.

Figure 2.39

EMPLOYMENT IN THE MISSOULA REGION

1969 - 1984

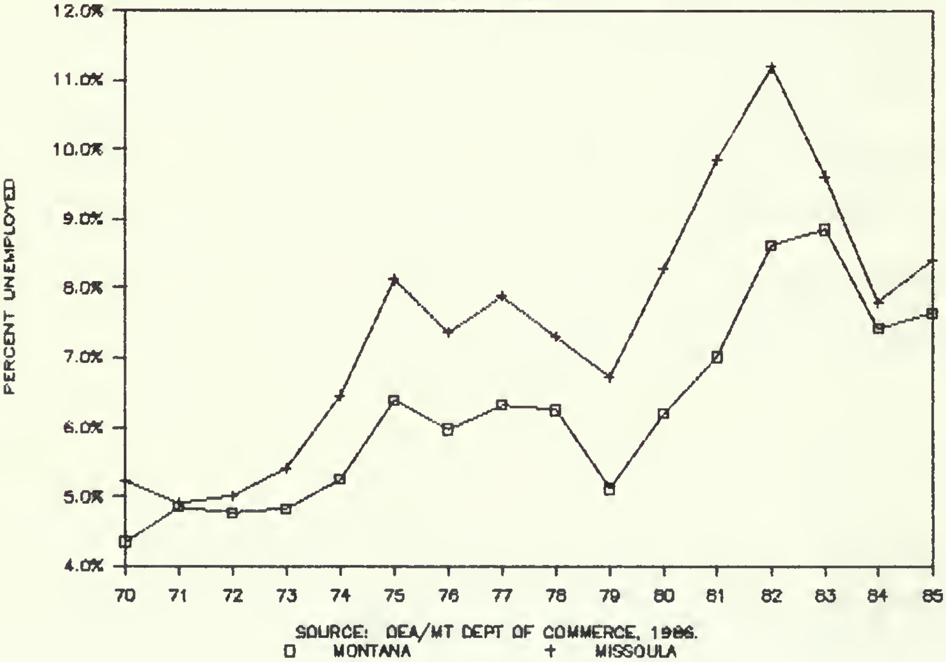


SOURCE: U.S. BUR OF ECONOMIC ANALYSIS.

Figure 2.40

UNEMPLOYMENT RATES IN THE MISSOULA REG

1970 - 1985



SOURCE: DEA/MT DEPT OF COMMERCE, 1986.

Total Personal Income and Nonfarm Earnings

Total personal income is the most comprehensive measure of all income flows for an area. It includes income from wages and salaries, employee benefits, that of proprietors (the self-employed), property income (interest, dividends, and rent), and transfer payments (items including social security, medical payments, and unemployment insurance). Table 2.9 shows an overview of total personal income in Montana and its regions in 1959, 1969, and 1979 through 1985, in constant 1985 dollars (so that inflation is removed). Table 2.10 indicates the percentage change in the state and the regions in total personal income for the period 1959 to 1969, 1969 to 1979, and 1979 to 1985.

In the 1959 to 1969 period inflation adjusted income grew approximately 36 percent in the state (which was a much smaller increase than in the U.S., at 61 percent). Regions that had faster growth rates than the state were Glendive-Sidney, Miles City, Helena, Glasgow-Wolf Point, Missoula, and Kalispell, in that order. Regions with lower than state growth rates were Anaconda-Butte, Havre, Lewistown, Bozeman, and Billings (ranked from lowest to highest). The Great Falls region's growth in income was similar to the state rate.

The 1969 to 1979 period was one of much higher growth in income than 1959 to 1969, for the state (see Chapter 1). High growth regions were Missoula, Bozeman, Helena, Billings, and Kalispell. Low growth regions were Glasgow-Wolf Point, Havre, Great Falls, Lewistown, Anaconda-Butte, and Miles City.

Table 2.9

TOTAL PERSONAL INCOME IN MONTANA REGIONS
(thousands of 1985 dollars)

Region	1959	1969	1979	1980	1981	1982	1983	1984	1985
Montana*	$4,182,161	$5,704,604	$8,477,157	$8,469,670	$8,710,618	$8,742,463	$8,807,337	$9,048,261	$8,873,000
Anaconda-Butte Region	537,393	595,750	789,802	766,813	785,297	770,614	769,129	771,503	750,050
Billings Region	718,729	963,386	1,611,373	1,609,305	1,672,619	1,739,104	1,752,553	1,822,010	1,808,700
Bozeman Region	245,859	319,830	571,057	566,165	581,084	599,255	618,856	652,878	654,025
Glasgow-Wolf Point Region	202,075	303,921	328,784	352,482	399,591	374,071	360,922	365,821	347,775
Glendive-Sidney Region	146,277	243,396	328,021	367,319	406,755	392,635	352,013	356,386	322,275
Great Falls Region	775,070	1,062,969	1,318,430	1,310,291	1,343,498	1,339,275	1,332,827	1,348,939	1,311,200
Havre Region	188,281	222,725	274,353	281,196	305,946	295,640	288,905	287,958	270,700
Helena Region	245,096	368,695	621,133	624,344	636,922	650,591	664,080	687,619	707,275
Kalispell Region	375,081	538,966	890,035	854,772	860,097	854,222	903,366	957,743	974,800
Lewistown Region	153,961	201,624	255,437	254,547	264,552	254,005	244,883	245,298	236,950
Miles City Region	163,209	253,440	343,534	365,650	376,012	393,086	391,088	368,161	330,125
Missoula Region	431,130	629,903	1,145,198	1,116,785	1,078,245	1,079,966	1,120,716	1,183,943	1,175,350

*Note - Unrevised statewide data (from April 1986, while the latest are from August 1986) used for comparability with regional information. Data for 1985 do not add exactly to U.S. BEA total due to rounding.

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Derived from U.S. Bureau of Economic Analysis (1959-1984) and and Bureau of Business and Economic Research, University of Montana (1985) data. In 1985 dollars using implicit price deflators for personal consumption expenditures.

Table 2.10

CHANGE IN TOTAL PERSONAL INCOME IN MONTANA REGIONS
(in constant dollars)

	1959-69	1969-79	1979-85
Montana	36.4%	48.6%	4.7%
Anaconda-Butte Region	10.9%	32.6%	-5.0%
Billings Region	34.0%	67.3%	12.2%
Bozeman Region	30.1%	78.6%	14.5%
Glasgow-Wolf Point Region	50.4%	8.2%	5.8%
Glendive-Sidney Region	66.4%	34.8%	-1.8%
Great Falls Region	37.1%	24.0%	-0.5%
Havre Region	18.3%	23.2%	-1.3%
Helena Region	50.4%	68.5%	13.9%
Kalispell Region	43.7%	65.1%	9.5%
Lewistown Region	31.0%	26.7%	-7.2%
Miles City Region	55.3%	35.5%	-3.9%
Missoula Region	46.1%	81.8%	2.6%

Source: Derived from U.S. Bureau of Economic Analysis data by the Office of Economic Analysis, Montana Department of Commerce, 1986.

The most recent period examined, 1979 through 1985, indicates much lower growth in inflation adjusted total personal income statewide compared with the previous periods analyzed (see Chapter 1 for details). The regions' growth varied substantially, from comparatively healthy growth in Bozeman, Helena, and Billings, to some growth in Kalispell, Glasgow-Wolf Point, and Missoula, to decreases in Lewistown, Anaconda-Butte, Miles City, Havre, Glendive-Sidney, and Great Falls.

In 1985, the regional economies measured by total personal income ranked from largest to smallest in the following order: Billings, Great Falls, Missoula, Kalispell, Anaconda-Butte, Helena, Bozeman, Glasgow-Wolf Point, Miles City, Glendive-Sidney, Havre, and Lewistown.

Figures 2.41 through 2.52 depict patterns in inflation adjusted total personal income and in nonfarm earnings (for which the data appear in Table 2.11) for the 1979 through 1985 period. Economists often use nonfarm earnings as a measure of economic performance, rather than total personal income, because nonfarm earnings more closely relate to production, as well as to typical job and income opportunities in an economy. Farm earnings are usually excluded from the analysis of short time periods because they are so volatile. Most of the difference between the income categories of total personal income and nonfarm earnings is made up by property income (dividends, interest, and rent), transfer payments, and farm earnings.

Table 2.11

NONFARM EARNINGS IN MONTANA REGIONS
(thousands of 1985 dollars)

Region	1959	1969	1979	1980	1981	1982	1983	1984	1985
Anaconda-Butte Region	$386,897	$432,028	$532,580	$490,973	$488,921	$458,747	$461,412	$451,903	$452,150
Billings Region	516,396	660,673	1,214,522	1,180,319	1,157,562	1,177,686	1,224,220	1,276,989	1,263,075
Bozeman Region	154,130	212,158	380,068	361,021	357,103	366,316	384,495	415,300	421,200
Glasgow-Wolf Point Region	124,648	149,355	197,165	189,864	210,108	183,240	181,933	193,627	179,900
Glendive-Sidney Region	94,546	130,277	221,341	242,523	274,639	254,316	215,480	230,523	203,700
Great Falls Region	544,692	720,202	956,107	894,981	852,482	823,364	842,976	874,976	849,000
Havre Region	97,738	121,827	184,545	171,322	161,497	156,603	159,172	166,315	163,400
Helena Region	177,094	275,308	457,197	450,477	443,684	447,993	470,167	488,221	512,450
Kalispell Region	272,546	409,928	605,033	544,934	524,492	489,582	544,563	589,950	599,825
Lewistown Region	74,706	86,500	126,820	120,140	113,658	108,473	107,204	109,476	111,025
Miles City Region	98,491	133,323	218,050	235,480	261,601	306,211	296,364	258,759	240,075
Missoula Region	319,436	480,200	828,352	782,992	709,148	680,012	742,963	793,665	787,925

Source: Office of Economic Analysis, Montana Department of Commerce, Derived from U.S. Bureau of Economic Analysis (1959-1984) and Bureau of Business and Economic Research, University of Montana (1985) data, using implicit price deflators for personal consumption expenditures.

Figure 2.41

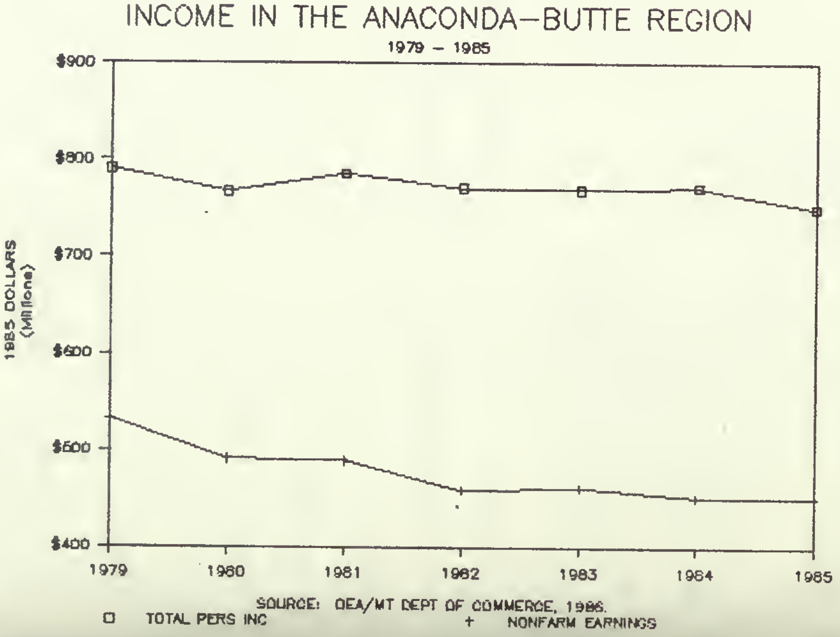


Figure 2.42

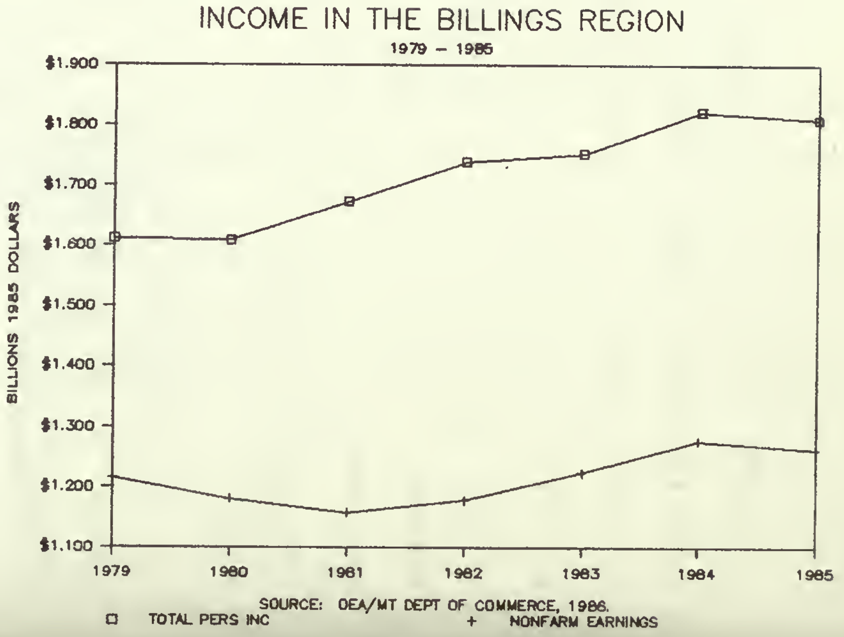
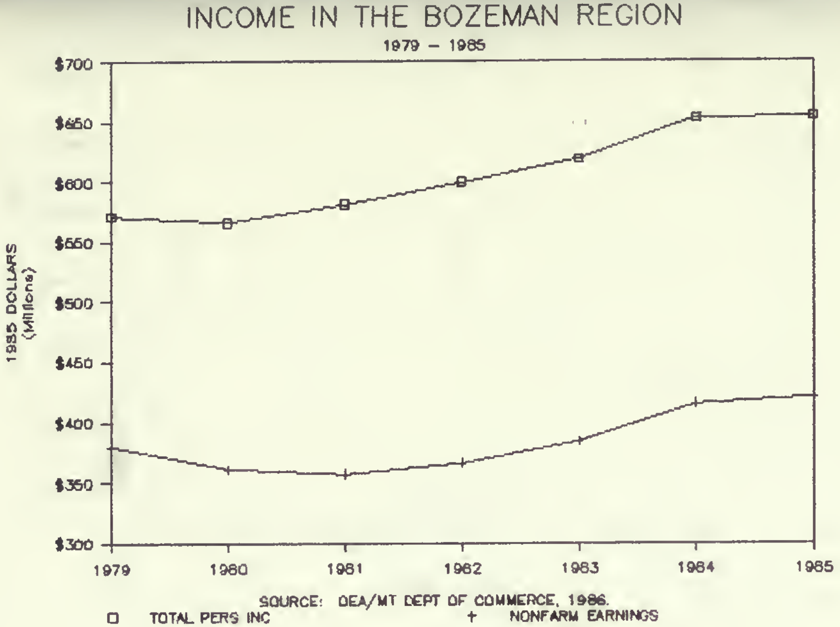


Figure 2.43

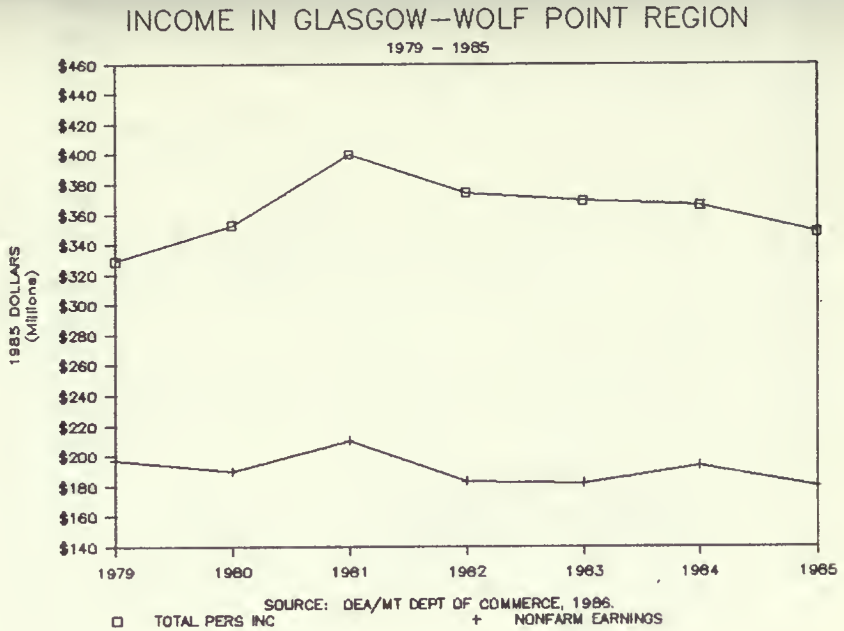

INCOME IN THE BOZEMAN REGION

1979 – 1985

SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

□ TOTAL PERS INC + NONFARM EARNINGS

Figure 2.44

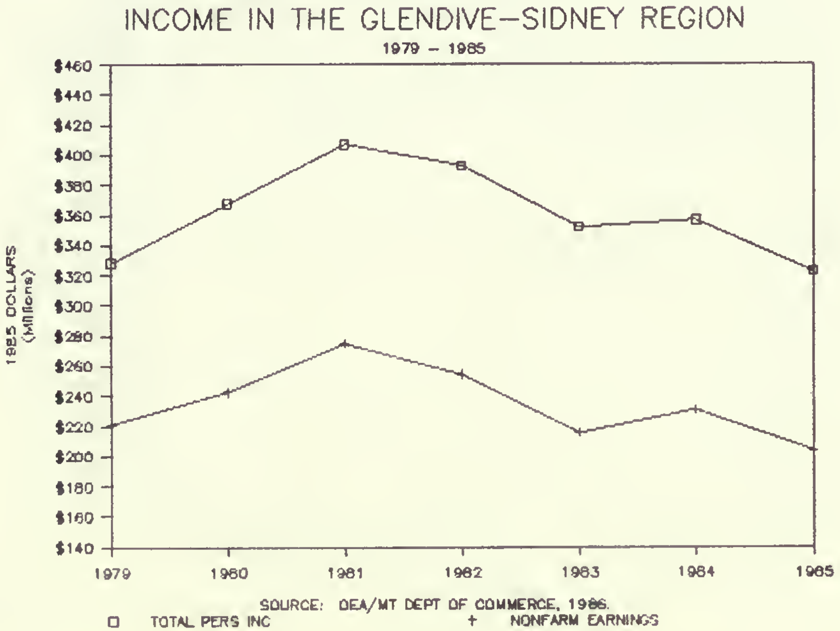

INCOME IN GLASGOW–WOLF POINT REGION

1979 – 1985

SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

□ TOTAL PERS INC + NONFARM EARNINGS

Figure 2.45

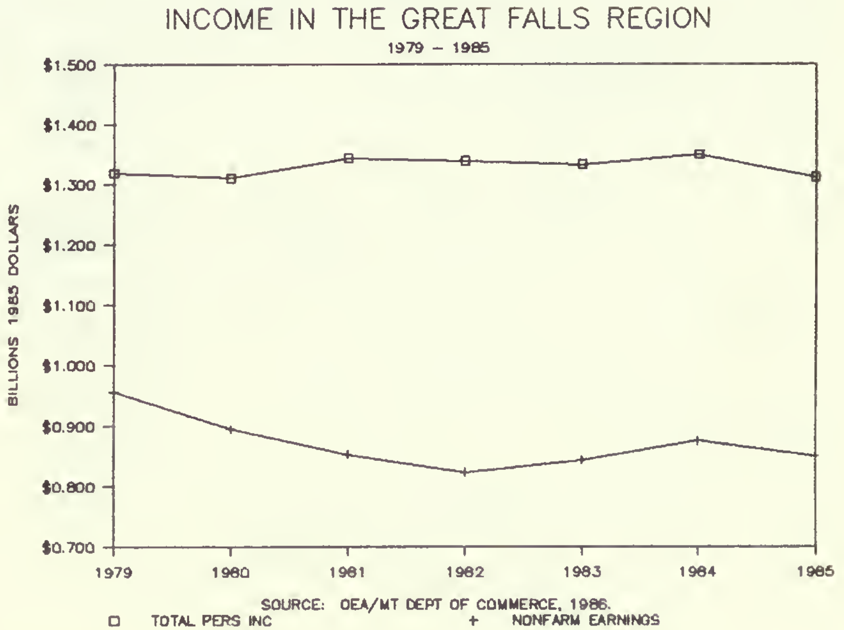

INCOME IN THE GLENDIVE–SIDNEY REGION

1979 – 1985

SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

□ TOTAL PERS INC + NONFARM EARNINGS

Figure 2.46


INCOME IN THE GREAT FALLS REGION

1979 – 1985

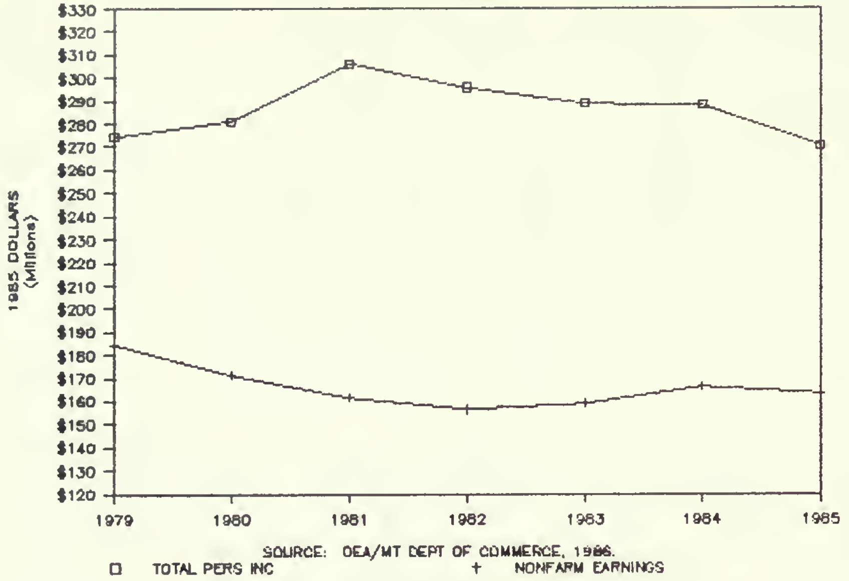
SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

□ TOTAL PERS INC + NONFARM EARNINGS

Figure 2.47

INCOME IN THE HAVRE REGION

1979 – 1985

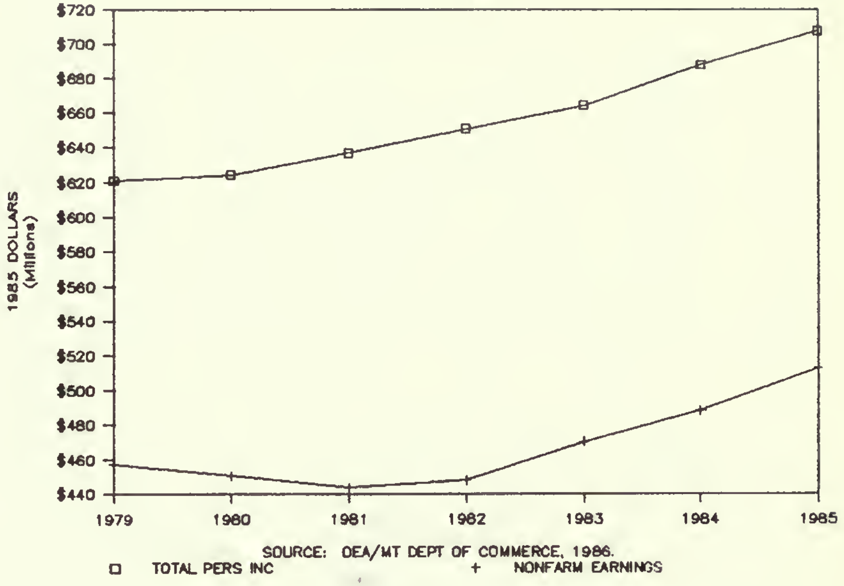


SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

Figure 2.48

INCOME IN THE HELENA REGION

1979 – 1985



SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

Figure 2.49

INCOME IN THE KALISPELL REGION

1979 – 1985

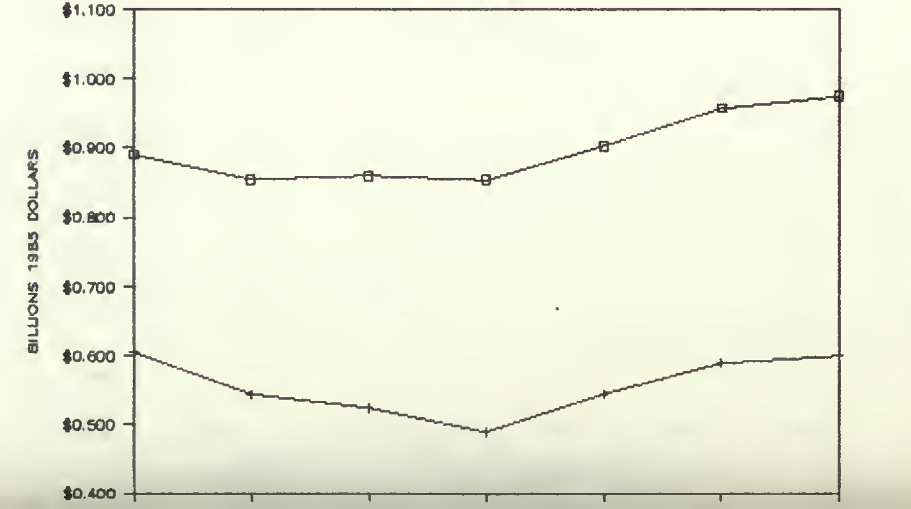


Figure 2.50

INCOME IN THE LEWISTOWN REGION

1979 – 1985

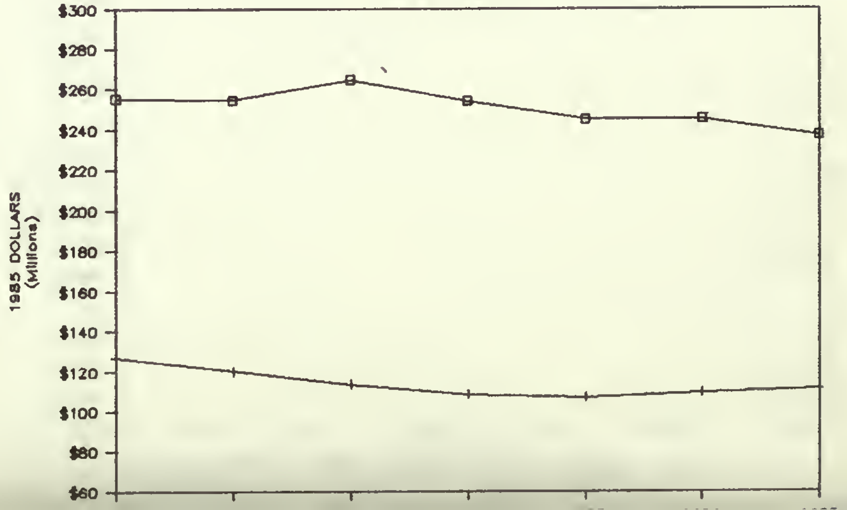
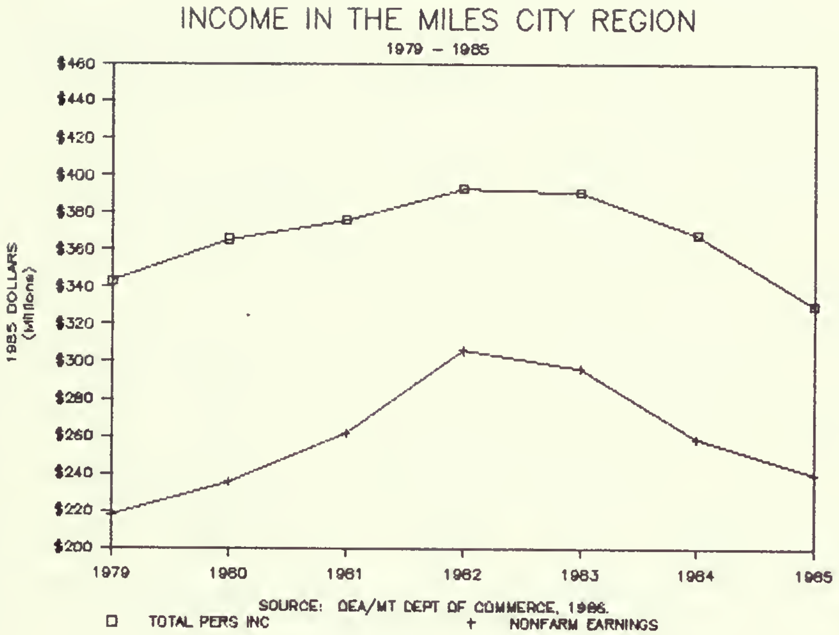
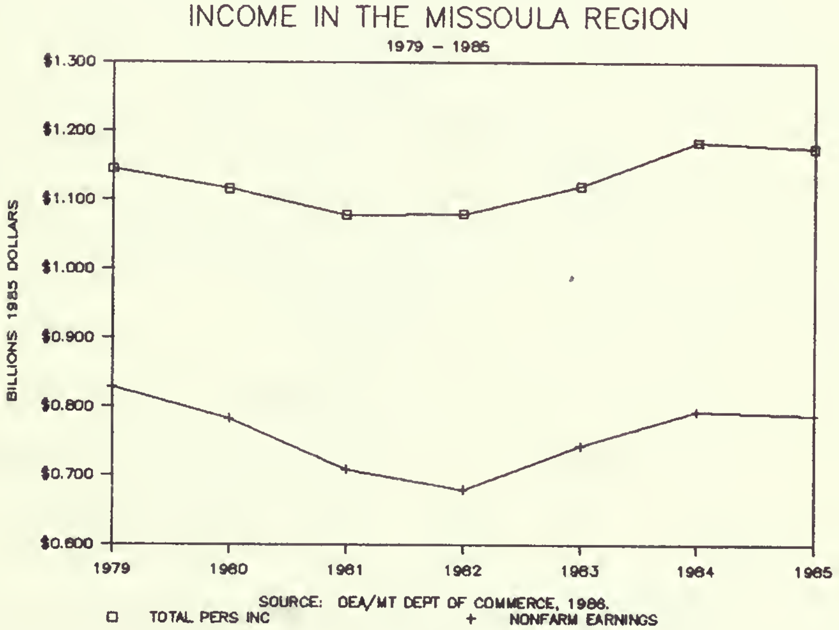


Figure 2.51



SOURCE: BEA/MT DEPT OF COMMERCE, 1986.

Figure 2.52



SOURCE: BEA/MT DEPT OF COMMERCE, 1986.

It is interesting to note that nonfarm earnings follow similar patterns to total personal income in most of the regions, with the exceptions of the Havre and Lewistown regions, where the economies are among the smallest in the state to begin with, and where farm earnings were enough to cause peaks in the regional economies in 1981.

Farm Earnings

Table 2.12 and Figures 2.53, 2.54, and 2.55 depict the farm earnings (which includes the net income of self-employed farmers and ranchers and hired employees) situation in 1959, 1969, and 1979 through 1985. What is revealed is that in recent years agricultural income has been deeply affected by low commodity prices and drought. A general financial crisis in agriculture has further reduced the viability of the industry in its current form.[16] This phenomenon has affected all regions of the state.

Farm earnings have deteriorated since 1981 and were negative in 1985, a drought year. In 1981, with about $400 million (in 1985 dollars) statewide in farm earnings, the regions ranked from highest to lowest in farm earnings in the following way: Great Falls, Havre, Glasgow-Wolf Point, Glendive-Sidney, Lewistown, Miles City, Billings, Anaconda-Butte, Bozeman, Helena, Kalispell, and Missoula.

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[16] For more information on the financial condition of Montana's farms and ranches, including some regional data, see the Montana Agricultural Statistics Service, "Montana 1985 Farm Finance Report" (published in 1986) and the "Montana 1984 Agricultural Finance Summary" (published in 1985), (Helena: Montana Department of Agriculture and U.S. Department of Agriculture).

Table 2.12

FARM EARNINGS IN MONTANA REGIONS
(thousands of 1985 dollars)

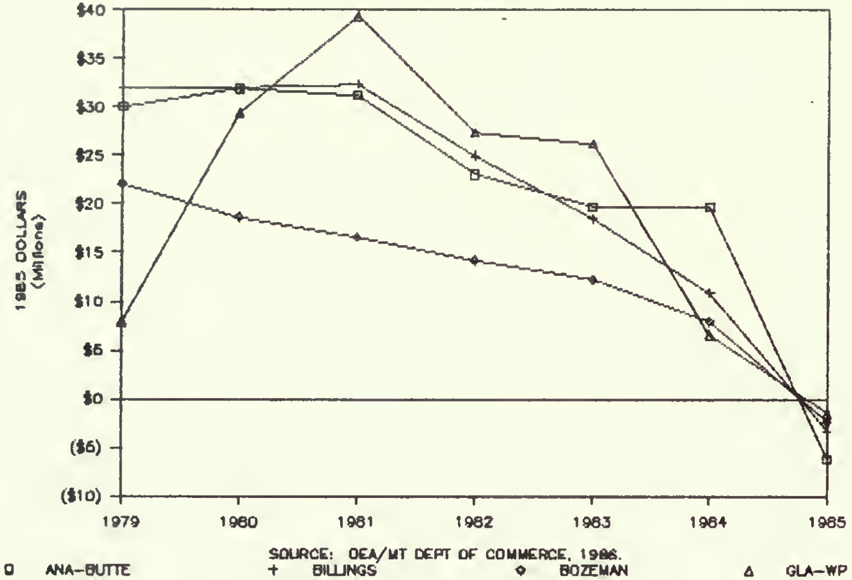
Region	1959	1969	1979	1980	1981	1982	1983	1984	1985
Anaconda-Butte	$32,057	$22,051	$30,008	$31,877	$31,149	$23,058	$19,727	$19,684	($6,200)
Billings	56,866	97,933	31,946	32,005	32,340	24,932	18,460	10,834	(3,225)
Bozeman	28,283	24,341	22,075	18,594	16,573	14,193	12,231	7,892	(2,325)
Glasgow-Wolf Point	33,357	82,565	7,866	29,379	39,363	27,301	26,178	6,564	(1,475)
Glendive-Sidney	23,900	64,777	19,686	34,732	37,478	24,210	20,445	7,263	(1,750)
Great Falls	93,770	131,940	25,726	52,156	83,425	73,133	51,949	16,424	(4,250)
Havre	55,836	49,307	8,939	19,718	42,087	28,467	25,404	12,387	(3,575)
Helena	15,984	16,150	11,015	10,530	11,511	9,299	7,041	5,802	(1,725)
Kalispell	21,433	14,110	12,957	12,221	11,492	10,718	6,441	1,535	(125)
Lewistown	43,476	61,184	29,985	29,281	34,952	22,062	16,752	9,116	(2,275)
Miles City	35,201	72,599	36,570	37,795	32,677	19,165	16,446	13,061	(3,925)
Missoula	19,506	10,871	12,484	11,636	8,844	9,151	7,062	6,304	(1,925)

Source: Office of Economic Analysis, Montana Department of Commerce, Derived from U.S. Bureau of Economic Analysis (1959-1984) and Bureau of Business and Economic Research, University of Montana (1985) data using the implicit price deflators for personal consumption expenditures, 1986.

Figure 2.53

FARM EARNINGS IN THE REGIONS

1979 – 1985

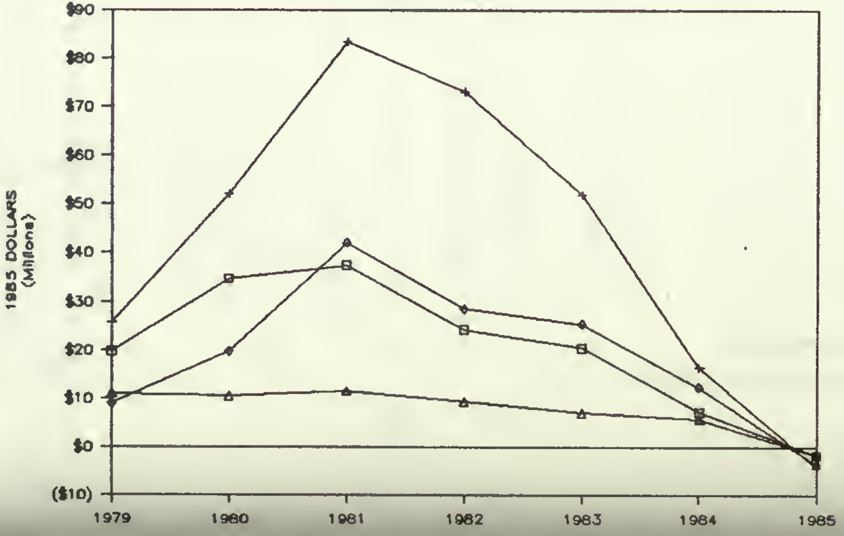


SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

Figure 2.54

FARM EARNINGS IN THE REGIONS

1979 – 1985

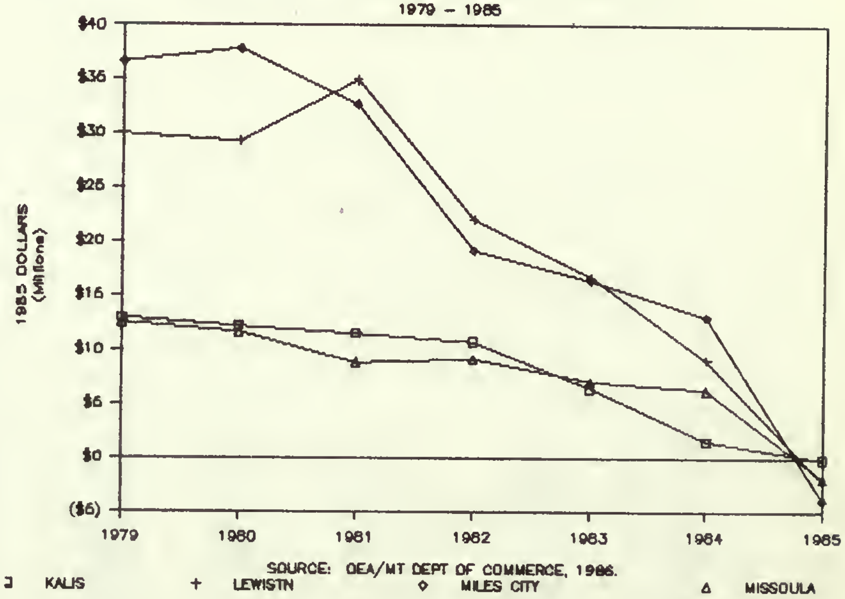


SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

Figure 2.55

FARM EARNINGS IN THE REGIONS

1979 – 1985



SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

Per Capita Personal Income

Table 2.13 and Figures 2.56 and 2.57 indicate per capita personal income (average income per person) in Montana regions. In 1979, a comparatively good year in the Montana economy, per capita income, in 1985 dollars, varied from a low among the regions of $9,500 in Glasgow-Wolf Point to a high of $11,800 in Billings. The comparable state per capita income that year was about $10,700. The rest of the regions ranked from highest to lowest in the following way: Helena, Great Falls, Miles City, Missoula, Lewistown, Anaconda-Butte, Glendive-Sidney, Kalispell, Bozeman, and Havre.

In 1985, there was more variation in per capita income levels, from a high of $12,300 in the Helena region to a low of $9,200 in the Miles City region, in 1985 dollars. These figures compare with a preliminary estimate of statewide per capita income of approximately $10,800 in 1985.

Table 2.14 depicts the regional percent of state per capita income, which in 1979 varied from a low of 88.5 percent in Glasgow-Wolf Point, to a high of 110.1 percent in Billings. In 1985 the low was 86.1 percent in the Miles City region and the highest per capita income was 114.3 percent in the Helena region.

Poverty

There is no readily available current information on poverty in Montana counties, so no current regional estimates were constructed. However, there is information from the decennial censuses on poverty in Montana that offer data on the

Table 2.13

PER CAPITA PERSONAL INCOME IN MONTANA REGIONS
(in 1985 dollars)

Region	1959	1969	1979	1980	1981	1982	1983	1984	1985
Montana*	$6,251	$8,220	$10,741	$10,766	$10,943	$10,860	$10,780	$10,981	$10,742
Anaconda-Butte Region	6,191	7,355	10,461	10,376	10,743	10,733	10,757	10,928	10,823
Billings Region	6,832	8,617	11,822	11,829	12,059	12,221	12,045	12,303	12,034
Bozeman Region	5,924	6,998	9,966	9,769	9,783	9,856	9,982	10,330	10,251
Glasgow-Wolf Point Region	4,531	8,126	9,502	10,267	11,482	10,537	10,276	10,162	9,824
Glendive-Sidney Region	4,586	8,307	10,413	11,581	11,999	10,998	9,972	10,212	9,678
Great Falls Region	6,787	9,039	10,969	11,276	11,602	11,526	11,295	11,393	11,207
Havre Region	6,470	8,311	9,904	10,295	11,085	10,635	10,355	10,248	9,773
Helena Region	7,023	9,081	11,719	11,706	11,730	11,829	11,774	12,021	12,279
Kalispell Region	6,456	7,613	10,114	9,629	9,632	9,512	9,884	10,298	10,112
Lewistown Region	5,723	8,543	10,512	10,523	10,887	10,410	10,036	10,053	9,711
Miles City Region	5,532	8,924	10,669	11,401	11,394	11,394	10,894	10,284	9,247
Missoula Region	6,503	7,748	10,555	10,074	9,636	9,712	9,980	10,367	10,212

*Note - Unrevised statewide data (from April 1986) are used for comparability with county information.

Source: Office of Economic Analysis, Montana Department of Commerce, 1986.
Derived from U.S. Bureau of Economic Analysis (1959-1984)
and BBER, University of Montana (1985) data, using
implicit price deflators for personal consumption expenditures.

Table 2.14

REGIONAL PER CAPITA PERSONAL INCOME PERCENT OF MONTANA AVERAGE
1959, 1969 AND 1979 - 1985

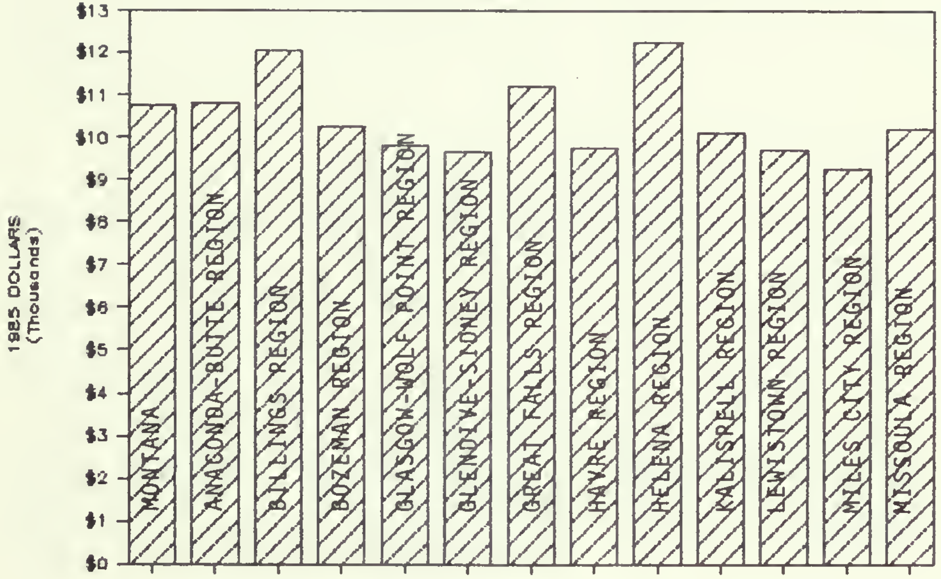
Region	1959	1969	1979	1980	1981	1982	1983	1984	1985
Anaconda-Butte Region	99.0%	89.5%	97.4%	96.4%	98.2%	98.8%	99.8%	99.5%	100.8%
Billings Region	109.3%	104.8%	110.1%	109.9%	110.2%	112.5%	111.7%	112.0%	112.0%
Bozeman Region	94.8%	85.1%	92.8%	90.7%	89.4%	90.8%	92.6%	94.1%	95.4%
Glasgow-Wolf Point Region	72.5%	98.9%	88.5%	95.4%	104.9%	97.0%	95.3%	92.5%	91.5%
Glendive-Sidney Region	73.4%	101.1%	96.9%	107.6%	109.6%	101.3%	92.5%	93.0%	90.1%
Great Falls Region	108.6%	110.0%	102.1%	104.7%	106.0%	106.1%	104.8%	103.8%	104.3%
Havre Region	103.5%	101.1%	92.2%	95.6%	101.3%	97.9%	96.1%	93.3%	91.0%
Helena Region	112.3%	110.5%	109.1%	108.7%	107.2%	108.9%	109.2%	109.5%	114.3%
Kalispell Region	103.3%	92.6%	94.2%	89.4%	88.0%	87.6%	91.7%	93.8%	94.1%
Lewistown Region	91.6%	103.9%	97.9%	97.7%	99.5%	95.9%	93.1%	91.6%	90.4%
Miles City Region	88.5%	108.6%	99.3%	105.9%	104.1%	104.9%	101.1%	93.7%	86.1%
Missoula Region	104.0%	94.3%	98.3%	93.6%	88.1%	89.4%	92.6%	94.4%	95.1%

Source: Derived from U.S. Bureau of Economic Analysis (1959-1984) and
and BBER, University of Montana (1985) data, by the Office of
Economic Analysis, Montana Department of Commerce, 1986.

Figure 2.56

PER CAPITA INCOME IN MONTANA REGIONS

1985

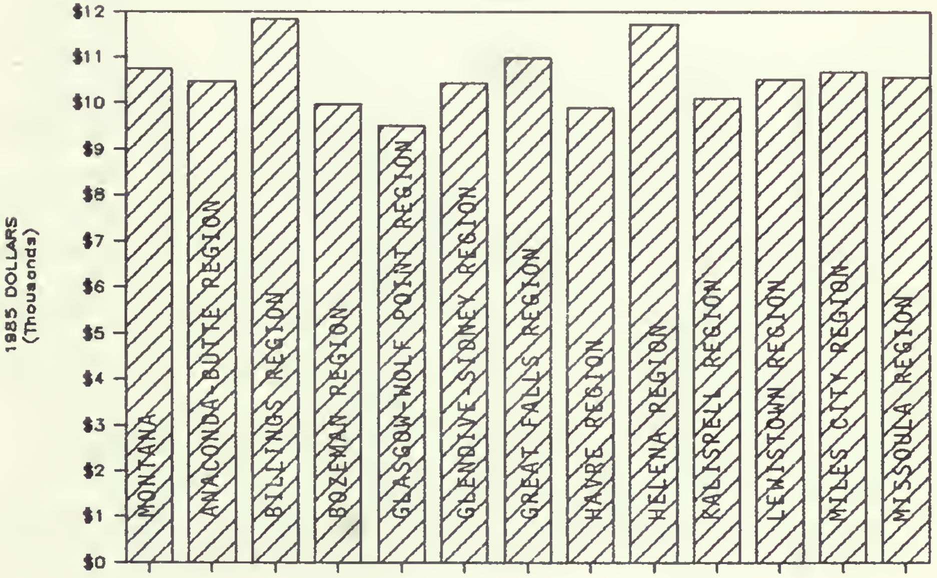


SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

Figure 2.57

PER CAPITA INCOME IN MONTANA REGIONS

1979



SOURCE: OEA/MT DEPT OF COMMERCE, 1986.

incidence of poverty in 1969 and 1979, which was used to calculate the poverty rates in Montana regions, as Table 2.15 shows. The Helena region was the lowest in poverty in the state in both years (9.7 and 8.9 percent of persons in 1969 and 1979 respectively), while the Havre region was highest in 1969 (at 17.9 percent), and the Lewistown region was highest in 1979 (at 17.5 percent). The incidence of poverty dropped slightly statewide between 1969 and 1979, as was the case in most regions.

In 1979 the regions that had a higher incidence of poverty than the state were the Glasgow-Wolf Point, Havre, Lewistown, and Miles City regions. The others were at the state rate or lower.

Table 2.15

PERCENT OF PERSONS BELOW THE POVERTY LEVEL IN MONTANA REGIONS: 1969 AND 1979

REGION	1969	1979
Montana	13.6	12.3
Anaconda-Butte	11.9	10.9
Billings	13.9	10.6
Bozeman	11.6	11.5
Glasgow-Wolf Point	17.1	14.8
Glendive-Sidney	12.1	12.4
Great Falls	13.0	12.1
Havre	17.9	15.2
Helena	9.7	8.9
Kalispell	13.2	11.7
Lewistown	15.4	17.5
Miles City	15.4	15.4
Missoula	12.2	12.2

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Derived from U.S. Bureau of the Census data.

Table 2.16 shows the incidence of poverty among native people for the state's seven Indian reservations, which ranged in 1979 from a low of 33.1 percent for the Crow Reservation to a high of 47 percent for the Fort Belknap Reservation.

Table 2.16

PERCENT OF INDIAN PERSONS IN POVERTY ON MONTANA RESERVATIONS: 1969 AND 1979

Reservation	Region	1969	1979
Blackfeet	Great Falls	51.3	36.7
Crow	Billings	44.7	33.1
Flathead	Kalispell	39.9	40.5
Fort Belknap	Havre	68.1	47.0
Fort Peck	Glasgow-Wolf Point	48.6	33.7
Northern Cheyenne	Miles City	40.7	41.8
Rocky Boy's	Havre	40.1	35.6

Source: U.S. Bureau of the Census.

BASIC INDUSTRIES

The following is a discussion of industries thought to be central to selected Montana regional economies, industries deemed "basic" (industries selling a good or service outside the region and bringing income into the region). The analysis measures basic jobs in industrial sectors using the methodology sketched in Appendix A.[17] The seven most populated regions are discussed.

A number of caveats apply to the analysis presented in this section. First, because of data limitations, self-employed persons were only included in the agricultural sector and were omitted from other industries. The sectors whose roles are most understated are retail trade and services, since self-employed people fill a significant proportion of jobs in these industries. For the time period studied, self-employed jobs grew substantially.[18]

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[17] Basic activity was defined by Phil Brooks, State Economist, Office of Economic Analysis, Montana Department of Commerce, 1986.

Second, the analysis compares 1979 with 1985. The results of this comparison have a downward bias, since 1979 was a year of growth in Montana and 1985 was a year of recession. Information for the year 1985 was retained, because it was the most recent year for which mostly complete data were available.

Third, the analysis assumes that all basic activity has been identified and that all other economic forces influencing the economies of Montana's regions are unimportant. All basic activity has not been identified in this analysis and other economic factors are important, as was noted in the introduction to this chapter. Another important factor, for example, is the substitution of local production of a good or service for importing the product for local use.

Fourth, the analysis only used jobs to measure the level and change in the activity of basic industries. Income is another way of measuring basic activity. In some cases (agriculture, for example) employment may be relatively stable while income earned in the sector changes significantly. Even with these limitations, the analysis does identify important changes in the economies of Montana's seven most populated regions.

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[18] Statewide, the number of nonfarm self-employed increased from 58,871 to 77,653, or by 31.9 percent, according to August 1986 U.S. Bureau of Economic Analysis data. Total earnings of nonfarm proprietors, however, declined by 14.8 percent in inflation adjusted dollars. Thus average (mean) earnings of nonfarm proprietors fell from $18,022 in 1979 to $11,641 in 1985 (in 1985 dollars), a decrease of 35.4 percent.

An Overview: Basic Industries in Seven Regions

As Table 2.17 indicates, the total loss of basic jobs from 1979 to 1985 in the seven most populated regions was 11,364 jobs, or 10.8 percent of the total. If the basic industry (export base) model is valid, then total employment in the seven regions should have also declined, which is true to a lesser extent, based on an incomplete data series. Total employment information, however, is not available for 1985 from the most comprehensive data series on jobs at the county level needed to derive regional information. Thus it is unknown at

Table 2.17

BASIC JOBS IN SEVEN MOST POPULATED MONTANA REGIONS: 1979 AND 1985

Region	1979	1985	Change	Percent Change
Anaconda-Butte	12,206	8,890	(3,316)	-27.2
Billings	22,107	20,167	(1,940)	-8.8
Bozeman	9,585	9,347	(238)	-2.5
Great Falls	21,428	17,228	(4,200)	-19.6
Helena	11,083	10,968	(115)	-1.0
Kalispell	12,845	12,396	(449)	-3.5
Missoula	16,192	15,086	(1,106)	-6.8
Total	105,446	94,082	(11,364)	-10.8

Source: Office of Economic Analysis, Montana Department of Commerce, 1986.

this point, whether or not the basic model works in this case.[19]

The Anaconda-Butte Region

In 1985, basic jobs in the Anaconda-Butte region were in the following proportions by broad industrial sector: first, agriculture (23.5 percent); second, services (13.2 percent); third, transportation and utilities (12.4 percent); fourth, government (9.2 percent); fifth, mining (specific percentage not indicated to protect individual firm confidentiality); sixth, manufacturing (specific percentage not shown for the same reason); and seventh, heavy construction (2.4 percent).

As Table 2.18 indicates, the Butte-Anaconda region lost 27.2 percent and a total of 3,316 of its basic jobs between 1979 and 1985. The decline was 35 percent in the private sector, while government employment provided more stability with only a 2.6 percent decline.

The largest industry of job loss was metal mining, with the closure of the Anaconda Company mine, which cost the area hundreds of jobs. The second largest loss was in primary

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[19] U.S. Bureau of Economic Analysis employment data is the most comprehensive, which will not be available until late 1987 for 1985. Total employment in the seven selected regions covered by unemployment insurance (u.i.) in addition to agricultural (including the self-employed) and railroad employment fell by only 0.7 percent between 1979 and 1985, however, there were large drops in the Anaconda-Butte region (13.6 percent) and in the Great Falls region (9.1 percent). Total u.i covered plus agriculture and railroad employment in the Missoula region fell by 1 percent, while the Billings, Bozeman, Helena, and Kalispell regions grew in this category of employment (2, 11.8, 5.5, and 5.2 percent respectively). It should be noted that if the basic industry model is working, the secondary economic impacts would probably be experienced with a lag--that is, not necessarily in the same year.

Table 2.18

*JOBS IN BASIC INDUSTRIES IN THE ANACONDA-BUTTE REGION: 1979 & 1985

	1979	1985	Change	Percent Change
Agriculture	2,275	2,090	(185)	-8.1
Mining	S	S	S	S
Bituminous Coal & Lignite Mining	0	S	S	S
Oil & Gas Extraction	S	S	S	S
Metal Mining	S	212	S	S
Mining and Quarrying of Non-Metallic Min.	276	444	168	60.9
Heavy Construction Contractors	76	209	133	175.0
Manufacturing	S	S	S	S
Nondurable Goods	S	S	S	S
Chemicals and Allied Products	S	S	S	S
Leather and Leather Products	0	S	S	S
Durable Goods	1,359	452	(907)	-66.7
Lumber and Wood Products	341	340	(1)	-0.3
Primary Metals Processing	S	S	S	S
Fabricated Metal Products	S	S	S	S
Electric and Electronic Equipment	0	S	S	S
Miscellaneous Manufacturing	39	S	S	S
Transportation and Utilities	1,731	1,106	(625)	-36.1
Railroad	735	232	(503)	-68.4
Electric, Gas, and Sanitary Services	996	874	(122)	-12.2
Services	1,200	1,171	(29)	-2.4
Hotel & Other Lodging Places	658	663	5	0.8
Business Services	0	76	76	NA
Medical and Other Health Services	S	S	S	S
Miscellaneous Services	S	S	S	S
Total Private	9,272	6,031	(3,241)	-35.0
Government	2,934	2,859	(75)	-2.6
Federal Government	785	819	34	4.3
State Government	2,149	2,040	(109)	-5.1
TOTAL BASIC JOBS	12,206	8,890	(3,316)	-27.2

*Note - Agriculture includes the self employed, while information for all other industries is for wage and salary employment. 1984 data for agriculture and railroads are used because of unavailability of 1985 data for those sectors.
NA - Not Applicable.
S - Suppressed to protect firm confidentiality.

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Based on Research and Analysis Bureau, Montana Department of Labor and Industry "202" employment data, and U.S. Bureau of Economic Analysis data for agriculture and railroads.

metals processing, with the closure of the smelter in Anaconda, which also cost the region hundreds of jobs. The third largest industry of job decline was in railroads, with a 68 percent drop in employment, and a loss of 503 jobs. Most of the lost railroad jobs were in Powell County, related to the bankruptcy of the Milwaukee Road and the subsequent closing of a repair facility in that county.[20]

Several basic industries increased in employment. These included mining and quarrying of non-metallic minerals (talc), health services, and heavy construction.

The Billings Region

Basic jobs in the Billings region in 1985 ranked in the following way: first, agriculture (20.4 percent); second, government (17.2 percent); third, services (13.2 percent); fourth, transportation and utilities (13.1 percent); fifth, manufacturing (12.3 percent); sixth, wholesale trade (9.5 percent); seventh, mining (6.4 percent); eighth, retail trade (4.1 percent); ninth, heavy construction contractors (3.1 percent); and last, insurance carriers (0.7 percent).

The Billings area lost 8.8 percent of its basic jobs between 1979 and 1985, as is seen in Table 2.19. There was a loss of 2,355 jobs in the private sector, which was partially offset by a gain of 415 jobs in federal and state government.

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[20] It must be noted, however, that railroad employment statistics are among the least reliable at the county level. These data were used to construct regional estimates. The U.S. Bureau of Economic Analysis allocates state railroad employment to non-metropolitan counties, while most other data on jobs is initially reported from specific locations via the unemployment insurance system.

Table 2.19

*JOBS IN BASIC INDUSTRIES IN THE BILLINGS REGION: 1979 & 1985

	1979	1985	Change	Percent Change
Agriculture	4,331	4,112	(219)	-5.1
Mining	1,323	1,282	(41)	-3.1
Bituminous Coal & Lignite Mining	917	739	(178)	-19.4
Oil & Gas Extraction	366	543	177	48.4
Metal Mining	40	0	(40)	-100.0
Heavy Construction Contractors	554	627	73	13.2
Manufacturing	3,848	2,488	(1,360)	-35.3
Nondurable Goods	2,557	1,563	(994)	-38.9
Food Processing	1,484	694	(790)	-53.2
Apparel & Other Textile Products	S	S	S	S
Printing and Publishing	152	182	30	19.7
Chemicals and Allied Products	S	86	S	S
Petroleum and Coal Products	820	559	(261)	-31.8
Rubber and Misc. Plastic Products	S	S	S	S
Leather and Leather Products	S	S	S	S
Durable Goods	1,291	925	(366)	-28.4
Lumber and Wood Products	535	182	(353)	-66.0
Furniture	S	47	S	S
Fabricated Metal Products	356	252	(104)	-29.2
Machinery, Except Electrical	106	137	31	29.2
Electric and Electronic Equipment	0	S	S	S
Transportation Equipment	S	75	S	S
Instruments and Related Products	S	S	S	S
Miscellaneous Manufacturing	220	211	(9)	-4.1
Transportation and Utilities	2,773	2,642	(131)	-4.7
Railroad	1,528	969	(559)	-36.6
Trucking	1,165	1,551	386	33.1
Pipelines	80	S	S	S
Communications	0	S	S	NA
Wholesale Trade	2,126	1,912	(214)	-10.1
Retail Trade	1,563	822	(741)	-47.4
Insurance Carriers	297	143	(154)	-51.9
Services	2,234	2,666	432	19.3
Hotel & Other Lodging Places	S	1,027	S	S
Business Services	494	658	164	33.2
Medical and Other Health Services	0	249	249	NA
Recreation Services	28	S	S	S
Nonprofit Membership Organizations	S	S	S	S
Miscellaneous Services	256	302	46	18.0
Total Private	19,049	16,694	(2,355)	-12.4
Government	3,058	3,473	415	13.6
Federal Government	1,882	2,127	245	13.0
State Government	1,176	1,346	170	14.5
TOTAL BASIC	22,107	20,167	(1,940)	-8.8

*Note - Agriculture includes the self employed, while information for all other industries is for wage and salary employment. 1984 data for agriculture and railroads are used because of unavailability of 1985 data for those sectors.
NA - Not Applicable.
S - Suppressed to protect firm confidentiality.

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Based on Research and Analysis Bureau, Montana Department of Labor and Industry "202" employment data, and U.S. Bureau of Economic Analysis data for agriculture and railroads.

The largest area of job loss was in food processing, with a loss of 790 jobs, over half of the industry. The estimated basic component of retail trade decreased by about 750 jobs. The lumber and wood products industry lost 353 jobs and railroad employment declined by 559. Other basic sectors declined by smaller amounts.

On the positive side, in addition to gains in state and federal government employment, the trucking industry expanded by 386 jobs, and basic services grew by 432 jobs, mostly from increases in medical and business services.

The Bozeman Region

Basic jobs in the Bozeman region in 1985 ranked by broad industrial sector in this way: first, government (34.9 percent, mainly Montana State University); second, agriculture (19 percent); third, manufacturing (15.1 percent); fourth, services (13.4 percent); fifth, retail trade (8.4 percent); sixth, transportation and public utilities (6.3 percent); seventh, mining (1.4 percent); and eighth, insurance carriers (1 percent).

The Bozeman Region lost 2.5 percent of its basic jobs, comparing 1985 and 1979 (Table 2.20). The basic industry portion of the private sector declined by 8 percent, while the basic portion of the public sector (state and federal government) grew by nearly 10 percent.

The single largest industry of decline in employment was railroads, where 39.4 percent or 384 jobs were lost, mostly in Park County. Lumber and wood products declined by 30.3 percent

Table 2.20

*JOBS IN BASIC INDUSTRIES IN THE BOZEMAN REGION: 1979 & 1985

	1979	1985	Change	Percent Change
Agriculture	1,888	1,775	(113)	-6.0
Mining	93	127	34	36.6
Oil & Gas Extraction	S	S	S	S
Metal Mining	0	S	S	NA
Mining and Quarrying of Non-Metallic Min.	S	96	S	S
Heavy Construction Contractors	80	54	(26)	-32.5
Manufacturing	1,699	1,413	(286)	-16.8
Nondurable Goods	364	358	(6)	-1.6
Food Processing	243	205	(38)	-15.6
Apparel & Other Textile Products	S	18	S	S
Paper and Allied Products	S	S	S	S
Printing and Publishing	81	48	(33)	-40.7
Chemicals and Allied Products	S	38	S	S
Rubber and Misc. Plastic Products	S	S	S	S
Leather and Leather Products	0	12	12	NA
Durable Goods	1,335	1,055	(280)	-21.0
Lumber and Wood Products	814	567	(247)	-30.3
Furniture	S	S	S	S
Primary Metals Processing	S	20	S	S
Fabricated Metal Products	S	63	S	S
Machinery, Except Electrical	18	10	(8)	-44.4
Electric and Electronic Equipment	S	213	S	S
Transportation Equipment	0	3	3	NA
Stone, Clay, and Glass Products	S	S	S	S
Instruments and Related Products	2	S	S	S
Miscellaneous Manufacturing	66	74	8	12.1
Transportation and Utilities	975	591	(384)	-39.4
Railroad	975	591	(384)	-39.4
Retail Trade	810	783	(27)	-3.3
Insurance Carriers	103	90	(13)	-12.6
Services	966	1,250	284	29.4
Hotel & Other Lodging Places	966	1,171	205	21.2
Recreation Services	0	79	79	NA
Total Private	6,614	6,083	(531)	-8.0
Government	2,971	3,264	293	9.9
Federal Government	574	653	79	13.8
State Government	2,397	2,611	214	8.9
TOTAL BASIC	9,585	9,347	(238)	-2.5

*Note - Agriculture includes the self employed, while information for all other industries is for wage and salary employment. 1984 data for agriculture and railroads are used because of unavailability of 1985 data for those sectors.
NA - Not Applicable.
S - Suppressed to protect firm confidentiality.

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Based on Research and Analysis Bureau, Montana Department of Labor and Industry "202" employment data, and U.S. Bureau of Economic Analysis data for agriculture and railroads.

and 247 jobs. Other losses were in electric and electronic equipment.

Additional basic industries besides the state and federal governments increased in employment. For example, recreation services and hotels/motels together added 205 jobs to the regional economy.

The Great Falls Region

Basic jobs in the Great Falls region in 1985 were in the following proportions: first, government (43.6 percent, with federal military jobs comprising 26.6 percent of basic jobs); second, agriculture (29.1 percent); third, services (10.3 percent); fourth, manufacturing (5.2 percent); fifth, mining (3 percent); sixth, heavy construction (2.6 percent); seventh, insurance carriers (2.4 percent); wholesale trade and transportation and utilities tied for eighth place in basic jobs (both 1.9 percent).

As Table 2.21 indicates, the Great Falls region lost about 20 percent of its basic jobs. The figure was 24.3 percent in private basic industries and 12.5 percent in government, for a total of 4,200 basic jobs. The largest single component of the job loss was the decrease in military personnel at Malmstrom Air Force Base of about 900. The Anaconda smelter closure is the cause of much of the manufacturing job loss in the region, however, the basic portions of trade and some services also suffered declines. There were gains in several sectors

Table 2.21

*JOBS IN BASIC INDUSTRIES IN THE GREAT FALLS REGION: 1979 & 1985

	1979	1985	Change	Percent Change
Agriculture	5,293	5,017	(276)	-5.2
Mining	708	519	(189)	-26.7
Oil & Gas Extraction	708	519	(189)	-26.7
Heavy Construction Contractors	670	449	(221)	-33.0
Manufacturing	1,663	890	(773)	-46.5
Nondurable Goods	878	705	(173)	-19.7
Food Processing	556	430	(126)	-22.7
Apparel & Other Textile Products	14	15	1	7.1
Paper and Allied Products	S	S	S	S
Chemicals and Allied Products	19	70	51	268.4
Petroleum and Coal Products	182	S	S	S
Rubber and Misc. Plastic Products	S	22	S	S
Durable Goods	785	185	(600)	-76.4
Lumber and Wood Products	36	18	(18)	-50.0
Furniture	S	S	S	S
Primary Metals Processing	S	6	S	S
Fabricated Metal Products	20	10	(10)	-50.0
Machinery, Except Electrical	42	25	(17)	-40.5
Electric and Electronic Equipment	S	0	S	NA
Transportation Equipment	30	36	6	20.0
Instruments and Related Products	S	S	S	S
Miscellaneous Manufacturing	S	S	S	S
Transportation and Utilities	568	325	(243)	-42.8
Railroad	S	325	S	S
Pipelines	S	0	S	NA
Wholesale Trade	1,092	325	(767)	-70.2
Retail Trade	575	0	(575)	-100.0
Insurance Carriers	503	420	(83)	-16.5
Services	1,757	1,769	12	0.7
Hotel & Other Lodging Places	958	1,044	86	9.0
Business Services	30	0	(30)	-100.0
Medical and Other Health Services	459	252	(207)	-45.1
Recreation Services	49	0	(49)	-100.0
Nonprofit Membership Organizations	S	S	S	S
Miscellaneous Services	S	S	S	S
Total Private	12,829	9,714	(3,115)	-24.3
Government	8,599	7,514	(1,085)	-12.6
Federal Government, Civilian	2,269	2,204	(65)	-2.9
Federal Government, Military	5,533	4,587	(946)	-17.1
State Government	797	723	(74)	-9.3
TOTAL BASIC	21,428	17,228	(4,200)	-19.6

*Note - Agriculture includes the self employed, while information for all other industries is for wage and salary employment. 1984 data for agriculture and railroads are used because of unavailability of 1985 data for those sectors.

NA - Not Applicable.

S - Suppressed to protect firm confidentiality.

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Based on Research and Analysis Bureau, Montana Department of Labor and Industry "202" employment data, and U.S. Bureau of Economic Analysis data for agriculture, railroads, and the military.

including nonprofit membership organizations, which consisted of jobs in the Blackfeet Tribal government, in Glacier County.

The Helena Region

Basic jobs in the Helena region in 1985 were dominated by government (55.2 percent, with 42.6 percent of the total in state government). Services provided the second largest percentage of jobs in basic industries (12.4 percent), manufacturing was third (9 percent), transportation and utilities were fourth (6.8 percent), finance and insurance were fifth (3.9 percent), heavy construction was sixth (1.8 percent), and mining was seventh and last (1.7 percent).

The Helena region was the most stable in overall basic employment of the seven examined, with 115 fewer basic jobs in the region in 1985 than in 1979, a drop of just one percent (Table 2.22).

Jobs in mining increased by 135, while services went up by 92 jobs, 264.7 and 7.2 percent respectively.

An industry that lost several hundred jobs was communications, as a result of the reorganization of Mountain Bell. Manufacturing declined by 218 jobs, much of which was from basic job losses in the wood products industry.

The Kalispell Region

Basic jobs in the Kalispell region in 1985 were dominated by manufacturing (41.4 percent), and wood products was its biggest component (29.5 percent of total basic jobs). Government and agriculture tied for second (18.4 and 18.3 percent respectively), services provided 11.5 percent of basic

Table 2.22

*JOBS IN BASIC INDUSTRIES IN THE HELENA REGION: 1979 & 1985

	1979	1985	Change	Percent Change
Agriculture	1,074	1,004	(70)	-6.5
Mining	51	186	135	264.7
Metal Mining	S	186	S	S
Mining and Quarrying of Non-Metallic Min.	S	0	S	S
Heavy Construction Contractors	98	197	99	101.0
Manufacturing	1,210	992	(218)	-18.0
Nondurable Goods	258	288	30	11.6
Food Processing	132	147	15	11.4
Apparel & Other Textile Products	0	S	5	NA
Chemicals and Allied Products	126	134	8	6.3
Rubber and Misc. Plastic Products	0	S	S	NA
Durable Goods	952	704	(248)	-26.1
Lumber and Wood Products	415	243	(172)	-41.4
Primary Metals Processing	S	S	S	S
Fabricated Metal Products	S	21	S	S
Machinery, Except Electrical	S	S	S	S
Electric and Electronic Equipment	0	S	S	NA
Transportation Equipment	S	S	S	S
Stone, Clay, and Glass Products	S	S	S	S
Instruments and Related Products	0	S	S	NA
Miscellaneous Manufacturing	S	S	S	S
Transportation	1,211	742	(469)	-38.7
Railroad	169	102	(67)	-39.6
Communications	1,042	640	(402)	-38.6
Finance, Insurance, and Real Estate	463	427	(36)	-7.8
Banking	97	104	7	7.2
Insurance Carriers	366	323	(43)	-11.7
Services	1,271	1,363	92	7.2
Hotel & Other Lodging Places	485	349	(136)	-28.0
Business Services	0	159	159	NA
Educational Services	S	S	S	S
Nonprofit Membership Organizations	471	519	48	10.2
Miscellaneous Services	S	S	S	5
Total Private	5,378	4,911	(467)	-8.7
Government	5,705	6,057	352	6.2
Federal Government	1,232	1,384	152	12.3
State Government	4,473	4,673	200	4.5
TOTAL BASIC	11,083	10,968	(115)	-1.0

*Note - Agriculture includes the self employed, while information for all other industries is for wage and salary employment. 1984 data for agriculture and railroads are used because of unavailability of 1985 data for those sectors.
NA - Not Applicable.
S - Suppressed to protect firm confidentiality.

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Based on Research and Analysis Bureau, Montana Department of Labor and Industry "202" employment data, and U.S. Bureau of Economic Analysis data for agriculture and railroads.

jobs, for fourth place, mining was fifth (4.5 percent), and heavy construction was last (2.3 percent).

Total basic jobs were 3.5 percent fewer in 1985 than in 1979, which was the third lowest decline of the seven regions examined (Table 2.17 and 2.23). Lumber and wood products lost 432 jobs, comparing 1985 and 1979 information, while primary metals also suffered large job losses. Railroad jobs were an estimated 281 fewer in 1985 than in 1979.

An area of substantial increase was metal mining, with the opening of a major new mine near Troy in Lincoln County. Services expanded in basic jobs by 18.5 percent, which was spread across medical, recreation, and nonprofit membership organizations (the Confederated Salish and Kootenai Tribal government in Lake County).

The Missoula Region

Basic jobs in the Missoula region in 1985 placed manufacturing first (32.5 percent, with 21.6 percent of the total in lumber and wood products), government second (28 percent), agriculture third (11.9 percent), transportation and utilities fourth (10.6 percent), services fifth (9.3 percent), retail trade sixth (4.3 percent), heavy construction seventh (2.5 percent), with mining and insurance carriers being very small employers (at 0.5 and 0.3 percent respectively).

As Table 2.24 indicates, the Missoula region lost 6.8 percent of its basic jobs (for a total loss of 1,106 basic jobs), which included a 6 percent loss in private basic

Table 2.23

*JOBS IN BASIC INDUSTRIES IN THE KALISPELL REGION: 1979 & 1985

	1979	1985	Change	Percent Change
Agriculture	2,335	2,272	(63)	-2.7
Mining	S	564	S	S
Oil & Gas Extraction	S	13	S	S
Metal Mining	S	S	S	S
Mining and Quarrying of Non-Metallic Min.	S	184	S	S
Heavy Construction Contractors	423	288	(135)	-31.9
Manufacturing	5,771	5,127	(644)	-11.2
Nondurable Goods	133	75	(58)	-43.6
Food Processing	120	52	(68)	-56.7
Apparel & Other Textile Products	S	5	S	S
Chemicals and Allied Products	S	8	S	S
Rubber and Misc. Plastic Products	0	S	S	S
Leather and Leather Products	S	S	S	S
Durable Goods	5,638	5,052	(586)	-10.4
Lumber and Wood Products	4,086	3,654	(432)	-10.6
Furniture	S	0	S	S
Primary Metals Processing	S	996	S	S
Fabricated Metal Products	34	70	36	105.9
Machinery, Except Electrical	27	176	149	551.9
Electric and Electronic Equipment	S	69	S	S
Transportation Equipment	58	75	17	29.3
Instruments and Related Products	0	S	S	NA
Miscellaneous Manufacturing	S	11		S
Transportation and Utilities	S	443	S	S
Railroad	S	443	S	S
Services	1,198	1,420	222	18.5
Hotel & Other Lodging Places	S	820	S	S
Medical and Other Health Services	0	S	S	NA
Recreation Services	0	62	62	NA
Nonprofit Membership Organizations	S	S	S	S
Total Private	10,682	10,114	(568)	-5.3
Government	2,163	2,282	119	5.5
Federal Government	1,579	1,619	40	2.5
State Government	584	663	79	13.5
TOTAL BASIC	12,845	12,396	(449)	-3.5

*Note - Agriculture includes the self employed, while information for all other industries is for wage and salary employment. 1984 data for agriculture and railroads are used because of unavailability of 1985 data for those sectors.
NA - Not Applicable.
S - Suppressed to protect firm confidentiality.

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Based on Research and Analysis Bureau, Montana Department of Labor and Industry "202" employment data, and U.S. Bureau of Economic Analysis data for agriculture and railroads.

Table 2.24

*JOBS IN BASIC INDUSTRIES IN THE MISSOULA REGION: 1979 & 1985

	1979	1985	Change	Percent Change
Agriculture	1,879	1,799	(80)	-4.3
Mining	88	83	(5)	-5.7
Bituminous Coal & Lignite Mining	S	0	S	S
Oil & Gas Extraction	S	S	S	S
Metal Mining	47	24	(23)	-48.9
Mining and Quarrying of Non-Metallic Min.	36	52	16	44.4
Heavy Construction Contractors	S	381	S	S
Manufacturing	5,730	4,907	(823)	-14.4
Nondurable Goods	1,065	1,164	99	9.3
Food Processing	422	302	(120)	-28.4
Apparel & Other Textile Products	S	50	S	S
Paper and Allied Products	S	S	S	S
Printing and Publishing	61	15	(46)	-75.4
Chemicals and Allied Products	S	29	S	S
Rubber and Misc. Plastic Products	36	S	S	S
Leather and Leather Products	0	S	S	S
Durable Goods	4,665	3,743	(922)	-19.8
Lumber and Wood Products	4,355	3,263	(1,092)	-25.1
Furniture	S	139	S	S
Primary Metals Processing	S	S	S	S
Fabricated Metal Products	49	114	65	132.7
Machinery, Except Electrical	20	32	12	60.0
Electric and Electronic Equipment	0	20	20	NA
Transportation Equipment	63	S	S	S
Instruments and Related Products	S	84	S	S
Miscellaneous Manufacturing	S	77	S	S
Transportation and Utilities	1,674	1,602	(72)	-4.3
Railroad	S	529	S	S
Trucking	S	1,073	S	S
Retail Trade	692	642	(50)	-7.2
Insurance Carriers	S	47	S	S
Services	1,043	1,409	366	35.1
Hotel & Other Lodging Places	571	751	180	31.5
Business Services	139	108	(31)	-22.3
Medical and Other Health Services	333	550	217	65.2
Total Private	11,565	10,869	(696)	-6.0
Government	4,627	4,217	(410)	-8.9
Federal Government	2,198	1,982	(216)	-9.8
State Government	2,429	2,235	(194)	-8.0
TOTAL BASIC	16,192	15,086	(1,106)	-6.8

*Note - Agriculture includes the self employed, while information for all other industries is for wage and salary employment. 1984 data for agriculture and railroads are used because of unavailability of 1985 data for those sectors.

NA - Not Applicable.

S - Suppressed to protect firm confidentiality.

Source: Office of Economic Analysis, Montana Department of Commerce, 1986. Based on Research and Analysis Bureau, Montana Department of Labor and Industr "202" employment data, and U.S. Bureau of Economic Analysis data for agriculture and railroads.

sectors, and an 8.9 percent decline in public basic jobs, between 1979 and 1985.

Manufacturing in the Missoula region was the broad industrial sector of largest decline, with a loss of 1,092 jobs in lumber and wood products, or 25.1 percent of the wage and salary jobs in the industry. Possible increases in contract wood products employees are not included in this analysis. The decline in wood products was offset somewhat by a substantial increase in paper and allied products. Services increased by 366 basic jobs. The increases were in hotel and other lodging places, and in medical services.

CONCLUSIONS

The preceding discussion has sketched trends in population, employment, unemployment, income, and in "basic" industries in Montana regions. The question may be: So what does this various information add up to? The sketch has varied from the longer view in population, from earliest censuses to the present, to the past fifteen or so years in employment and unemployment, since 1959 on income, to comparing just two years, 1979 and 1985, in the discussion on basic industries.

The information reviewed on population indicates that Montana has had slow and rapid periods of growth, with only one decade of decline. The current sense of comparative stagnation perhaps uses the relatively rapid growth decade of the 1970s as a reference point, or perhaps high growth regions and states in the U.S. These statewide trends, of course, have been shaped by the movement of people in and out of the regions of Montana that make up this geographically very large state, movement of people across the state's borders, along with natural population increase (the excess of births over deaths).

The Anaconda-Butte region peaked in population in 1920 and has been declining since, no doubt because of the changing realities of the mining industry, in the context of an international economy. Yet the region remains historically and culturally interesting, has good location advantages (in terms of surface transportation) and education facilities (including Western Montana College and the Montana College of Mineral Science and Technology), still has some mining and even more potential, and has significant recreational resources. Indeed, the region remains the fifth largest in population among the regions, where some 69,000 people live and work.

The Billings region in 1985 was at its historic peak in population, retains the largest population and possibly has the most diversified economy of the state's regions, as a Great Plains agricultural, natural resources, transportation, and trade and service center (including federal district and regional offices which manage and administer nationally owned resources). It is also the home of Eastern Montana College.

The Bozeman region is smaller than the previous two in population but, like the Billings region, has been characterized by population growth, and has as one of its main resources a major university (Montana State University) that historically has specialized in agriculture and engineering, but now is more diverse in what it has to offer. Among the basic industries, agriculture and manufacturing are second and third in jobs, following government. The Bozeman region also has important tourist and recreational activities that contribute to its regional economy, including the fact of being adjacent to Yellowstone National Park. It seems to be an area to some extent in which people choose to live, and then figure out some way to support themselves.

The Glasgow-Wolf Point region in northeastern Montana has enjoyed a relatively stable population with approximately 45,000 people in the 1920 to 1940 period and since 1970 has scaled back to around 35,000.[21] The reason is perhaps that the main industry has been agriculture, with the exception of a short lived major military base. There has been a steady evolution in agriculture for the entire century, that will probably continue to substitute capital for labor, which will have a downward effect on employment and population. It seems that the comparative advantage of the Glasgow-Wolf Point region will probably remain in grain and other agricultural commodities and at times when the price is right, oil and gas. There is also some manufacturing based on federal government contracts at A & S Tribal Industries, on the Fort Peck reservation. Finally, federal, state, and Fort Peck Tribal government contribute to regional employment.

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[21] Also see an unpublished paper by Dwayne Ward, "Economic Conditions in Northeastern Montana: An Overview," (Helena: Montana Department of Commerce, April 1986).

The Glendive-Sidney region, though smaller in population historically (while similar currently), has some commonalities with the Glasgow-Wolf Point region in population trends for many of the same reasons. First, it is a northern Great Plains agricultural area. This region, however, historically has had (and in 1985 had) a large oil and gas sector that provided the most jobs in this industry of all the regions examined (the Billings and Great Falls regions were second and third, respectively). The crisis in agriculture and the current low price for crude oil make the region's future uncertain.

The Great Falls region, which is currently the second largest populated region in the state, was a relatively high growth region until 1960. Since then it has remained relatively stable in population.

Basic jobs in the Great Falls region declined substantially between 1979 and 1985 (nearly 20 percent, second only to Anaconda-Butte). Interestingly, it appears that government employment has not provided the stability in the Great Falls region that has been the case in many of the other regions, since federal military employment appears to be less stable than other government employment (military employment declined between 1979 and 1985 in the Great Falls region). Proximity to Glacier National Park and Alberta are important location factors for this region.

The Havre region has had a comparatively steady population since 1920, has the second smallest regional population in the state and is primarily agricultural. Since a 1979 peak in employment in the region there have been declines in railroads (39 percent between 1979 and 1984) and manufacturing (machinery). State (including Northern Montana College) and federal government increased between 1979 and 1985, making government the second largest employer, following agriculture.

The Helena region has been one of population growth (second highest among the regions in the 1970s), comparative prosperity, and recent economic stability among Montana regions, which has been based principally on jobs in the public sector, particularly state government.

The Kalispell region had the fourth highest population growth rate in the 1970s (23.4 percent), and is an attractive region of the state where some people possibly live by choice for aesthetic reasons. The region's population was 96,400 in 1985, fourth highest of the regions. Wood products is a central industry, as is agriculture, government, mining, trade, and services.

The tourism and recreation parts of the trade and services sectors are important to this region. Flathead Lake, the Seeley-Swan valley, and adjacent wilderness areas are stunning. Proximity to Glacier National Park is also important.

The Lewistown region reached its population peak of close to 46,000 in 1920 and was the smallest region in 1985 at an estimated 24,400 people. Its economic base consists mainly of agriculture, government, wood products, and oil and gas mining. The region's economy declined between 1979 and 1983, in part because of the bankruptcy of the Milwaukee Road. Since 1983 the region's economy has recovered slightly.

The industries that were central to the Miles City region in southeastern Montana in 1985 were agriculture, transportation and public utilities (electricity generation and railroad activity), coal mining, federal government, state government, membership organizations (Northern Cheyenne government), hotels and motels, and a small amount of manufacturing.[22]

The region has enormous coal resources and a strong ranching tradition. A decade ago many felt the region would become one of the nation's boiler rooms, with heavy smokestack industries locating near the energy resources.[23] This has not happened and it does not appear that it will happen in the short run. In fact, the coal industry has been affected by the recent falling price of oil on the world market. Coal is a major competitive fuel for power plants. In the longer run, both growth and decline are possibilities surrounding coal mining and related industries.

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[22] Dwayne Ward, "Economic Conditions in Southeastern Montana: An Overview," (Helena: Montana Department of Commerce, August 1986).

[23] One dramatic example of possibilities in the region is depicted in the 1971 North Central Power Study, a product of a coordinating committee composed of the Bureau of Reclamation and 35 major private and public electric power suppliers which proposed 42 coal power plants, 13 of them of 10,000 megawatt size or larger. In retrospect, it appears that the study was useful mainly to show actual and potential stockholders of major energy companies the industrial potential of southeastern Montana and the northern Great Plains area in general.

The Missoula region was the fastest growing in population in the state in the 1970s (34 percent). The primary economic forces fueling this growth were an expansion in the forest products industry, additional federal and state government employment, along with increases in tourism, transportation, and manufacturing other than processing forest products. In addition, the population growth may have been partially because people liked the region, some moved there and then found employment, which was facilitated by the expansion of the industrial sectors indicated above. It is the third most populated region and is a state cultural and educational center.

The conclusion that one might reach is that Montana regions face uncertainty in a changing economy. Agriculture is facing difficult times. While mining is typically a boom and bust industry, the state appears to be entering a period of increases in metal mining activities. World market conditions have resulted in the opening of some new metal mines recently and have rekindled interest in precious metals deposits (including platinum, chromium, and palladium, as well as gold). The wood products industry faces long-run, structural changes. Issues include the diminishing supply of big dimension timber in the state, retooling that will be required to utilize the resources available, and the need to improve cost competitiveness in a land-locked area with very limited transportation options. Tourism and recreational industries and activities, such as skiing, hot springs, resorts, and outfitting and hunting, are perhaps some of the state's greatest, and somewhat untapped, foundations.

Montana is rich in human and natural resources, and in potential. Its people are well educated and industrious. The state still has vast water, wildlife, mineral, timber, and other natural resources. Montana has space, wild places, and clean air, which may in the long run prove to be some of its greatest assets.

CHAPTER 3

CHANGES IN INDUSTRIAL STRUCTURE AND THE GROWTH OF EMPLOYMENT AND EARNINGS IN MONTANA 1979-1984

by

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It is widely recognized that both Montana and the United States as a whole have recently undergone dramatic changes in industrial structure. These changes have most often been characterized as a shift from manufacturing and the production of goods in general to the production of services, technology, and information. In Montana, where considerable reliance has been placed on export base models of economic growth, this shift in industrial structure has meant the contraction of activities usually considered to be "basic" and the simultaneous expansion of others considered "derivative," a situation the theory would not predict.

It is also widely appreciated that this shift in industrial structure has been accompanied by significant changes in employment opportunities. The occupations associated with particular industries have expanded or contracted as the industries themselves have, and in general, new employment has been created in occupations that pay less, are less unionized, employ more women, and are of generally lower quality than the occupations in decline.

The purpose of this chapter is to examine the changes in employment opportunities that have occurred in Montana as a result of the transformation of its industrial structure over the period 1979 to 1984. The end points of this period were years of economic growth for Montana and were chosen to minimize the possibility of upward or downward bias in the results. However, since in 1984 Montana's economy had not fully recovered from the recessions of the early 1980s, employment growth for the study period is somewhat understated, i.e. less than it would have been if two equally expansionary years were being compared.

This chapter is organized as follows. The next two sections describe the shift in the industrial structure of employment, its sources, and its impact on employment by occupation. The following section analyzes how changes in employment by occupation over the study period affected the level and distribution of earnings and unionization. The final two sections examine the differential in male and female earnings in Montana, and the response of that differential to changing occupational employment opportunities.

SHIFTS IN THE INDUSTRIAL STRUCTURE OF EMPLOYMENT

Columns 1 and 2 of Table 3.1 show employment in each of 40 industries in Montana for 1979 and 1984 respectively, and column 3 gives the change in employment for those industries over the period, during which employment in general grew by 2.26 percent.

Table 3.1

MONTANA EMPLOYMENT: INDUSTRY MIX AND SHARE ANALYSIS*

INDUSTRY	1979	1984	Change	National average growth effect	Specific industry effect	Competitive share effect
Total Employment	393,454	402,333	8,879	28,880	-1,297	-18,704
Agriculture	37,647	37,299	-348	2,763	-3,844	733
Mining	8,567	8,762	195	629	-302	-132
Construction	23,986	23,063	-923	1,761	-1,362	-1,322
Manufacturing	29,041	24,694	-4,347	2,132	-4,792	-1,687
Non-durable goods	9,473	8,775	-698	695	-876	-517
Food and kindred products	4,148	3,199	-949	304	-593	-660
Textiles	4	2	-2	0	0	-2
Apparel and other textile products	228	488	260	17	-34	277
Paper and allied products	716	911	195	53	-79	221
Printing and publishing	2,599	2,568	-31	191	120	-342
Chemicals and allied products	607	550	-57	45	-80	-22
Rubber and plastic products	100	128	28	7	-7	28
Other non-durables	1,071	929	-142	79	-203	-18
Durable goods	19,568	15,919	-3,649	1,436	-3,916	-1,169
Furniture, lumber, and wood products	12,219	10,188	-2,031	897	-1,922	-1,006
Primary metal processing	3,300	1,577	-1,723	242	-1,266	-699
Fabricated metal products	616	651	35	45	-133	123
Machinery except electrical	601	715	114	44	-117	187
Electrical machinery and equipment	369	404	35	27	-12	20
Motor vehicles and equipment	42	121	79	3	-9	85
Aircraft and transportation equipment	132	73	-59	10	-15	-54
Other durables	2,289	2,190	-99	168	-442	175
Transportation and Public Utilities	26,358	25,030	-1,328	1,935	-2,852	-411
Trucking and warehousing	6,802	8,084	1,282	499	-270	1,053
Other transportation	10,462	7,647	-2,815	768	-2,595	-988
Communications	5,123	4,401	-722	376	-180	-918
Utilities and sanitary services	3,971	4,898	927	291	193	443
Wholesale Trade	18,522	18,525	3	1,360	-27	-1,330
Retail Trade	70,524	72,770	2,246	5,176	2,009	-4,939
General merchandise stores	6,224	6,047	-177	457	-473	-161
Food, bakery, and dairy stores	8,899	9,472	573	653	620	-700
Automobile dealers and service stations	10,273	8,834	-1,439	754	-1,137	-1,056
Eating and drinking places	22,723	24,818	2,095	1,668	2,451	-2,024
Other retail trade	22,405	23,599	1,194	1,645	548	-999
Finance, Insurance and Real Estate	22,511	26,288	3,777	1,652	3,123	-998
Insurance	4,552	5,301	749	334	452	-37
Finance and real estate	17,959	20,987	3,028	1,318	2,671	-961
Services	81,291	92,286	10,995	5,967	10,980	-5,952
Business services	7,507	11,392	3,885	551	3,284	50
Repair services	6,254	7,803	1,549	459	774	316
Hotels and lodging places	8,157	8,186	29	599	845	-1,415
Other personal services	10,055	10,878	823	738	447	-362
Entertainment and recreation	4,414	5,409	995	324	467	204
Health services	19,806	23,587	3,781	1,454	2,916	-589
Private educational services	2,573	2,382	-191	189	237	-617
Other professional services	22,525	22,649	124	1,653	2,010	-3,539
Government	75,007	73,616	-1,391	5,506	-4,230	-2,667

Source: Phil Brooks, "Mix and Share Analysis," xerox, Office of Economic Analysis, Montana Department of Commerce, September 1986.

*The employment data presented in this table differ somewhat from the statewide data presented in Table 2.6. This information is a revised version of that in Table 2.6, available only at the state level.

Table 3.1 confirms the fact that the industrial structure of employment is changing substantially.

Over the period, employment in all the goods producing sectors except mining--agriculture, manufacturing, and construction--declined. The decline in manufacturing employment, however, was not general. Within manufacturing some industries gained employment, even, in some instances, at rates well above the national average. These gains, however, were small in absolute numbers, and were more than outweighed by lost employment in primary metals, wood products, and several other sectors.

Outside the goods producing industries, however, only railroads (part of "Other transportation" in Table 3.1), communications, and federal government employment declined significantly. Employment in retail trade; finance, insurance, and real estate; and almost all types of services grew. Two branches of retail trade, general merchandise stores and automobile dealers and service stations, were exceptions to this pattern, as was private household employment (included in "Other personal services" in Table 3.1), but in general the table confirms the shift of employment in favor of trade and services.

Between 1979 and 1984, Montana's employment growth fell far below that of the nation as a whole, which increased 7.34 percent. It is widely believed that Montana's relatively poor employment performance was attributable to the preponderance in the state's economy of industries that were particularly weak nationally during this period: forest products, minerals, and agriculture. The Office of Economic Analysis of the Montana Department of Commerce, however, has developed evidence which may contradict that conclusion.[1] This evidence is summarized in columns 4 to 6 of Table 3.1, which are adapted from the Department of Commerce analysis.

Column 4, labeled "National average growth effect," lists for each industry the amount by which employment would have grown if that industry had expanded at the national average rate for all industries. Column 5, labeled "Specific industry effect," shows the difference between the national average growth effect and the amount employment would have grown had the industry in Montana expanded at the same rate as it did in the rest of the country. Thus, for example, had mining in Montana grown at the same rate as national employment in general (7.34 percent), there would have been 629 new mining jobs. However, if Montana mining employment had grown at the national rate for mining (3.82 percent), there would be 302 fewer jobs than the 629, for a net change of 327. Where the specific industry effect is positive the industry in question grew at above the national average rate. The sum of the specific industry effect and the national average growth effect shows the number of jobs that would have been created in an industry if it had grown at exactly the same rate as its national counterpart.

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[1] Phil Brooks, "Mix and Share Analysis," xerox, Office of Economic Analysis, Montana Department of Commerce, September, 1986.

Column 6, labeled "Competitive share effect," is the difference between the actual growth that occurred in Montana and the sum of the national average growth and specific industry effects. Thus, for example, while mining employment would have increased by 327 if mining had grown at the rate of its national counterpart, it in fact grew by 195 jobs; the competitive share effect is -132. This means that Montana has 132 fewer mining jobs than it would have had if it had maintained its share of the national industry.

The total for column 4 shows that had Montana's employment grown at the same average rate as the rest of the nation's, there would have been an increase in jobs of 28,880 rather than the actual increase of 8,879; there was thus a shortfall in job creation of 20,001. The total for column 5 shows that very little of this shortfall, 1,297 jobs, was attributable to the prevalence in Montana of industries with poor national performance. It is true that several important Montana industries did poorly nationally, including agriculture, metal mining and processing, construction, wood products, and railroads. But the weakness of those industries was compensated for by the strength of others, notably services, trade and finance.

The total for column 6 shows that almost all of Montana's job creation shortfall, 18,704 jobs, was because of its loss of competitive shares, i.e. the failure of Montana industries to grow as fast as their national counterparts. This was true of every major sector except agriculture. Table 3.2 lists for

Table 3.2

COMPETITIVE SHARE EFFECT AS A PERCENTAGE OF 1979 EMPLOYMENT

Sector	Competitive Share Effect as a Percentage of 1979 Employment
Agriculture	1.9
Mining	-1.5
Construction	-5.5
Manufacturing	-5.8
Transportation and public utilities	-1.5
Wholesale trade	-7.2
Retail trade	-7.0
Finance, insurance, and real estate	-4.4
Services	-7.3
Government	-3.6
All sectors	-4.8

Source: Same as Table 3.1.

each major sector the competitive share effect as a percentage of that sector's 1979 employment. Measured in this fashion, the loss of competitive shares was greatest in services and trade and relatively low in agriculture, mining, and transportation and public utilities. Somewhat surprisingly, the industries in Montana in which the most job creation occurred were also those which grew the least in relation to their national counterparts.

SHIFTS IN THE OCCUPATIONAL STRUCTURE OF EMPLOYMENT

Annual data on employment by occupation is not available for Montana. It is possible, however, to calculate the employment by occupation which is implied by any pattern of employment by industry. To do so in this case, a matrix was developed that distributes employment in 40 industries to 92 occupations. Total employment in each industry may then be allocated to various occupations and employment for each occupation summed. The source of data for the matrix was the 1980 United States Census of Population, which reports the occupation of employed persons by industry in Montana during the census year. To apply the matrix outside the census year, it must be assumed that the occupational structure of employment in each industry was constant over the study period. In fact, however, there was probably some change.

Table 3.3 presents the results of this type of calculation in summary form. For ease of reporting, employment by occupation has been aggregated from the 92 occupations used in the calculation to 16.

Columns 1 and 2 of Table 3.3 show calculated employment by occupation for 1979 and 1984 respectively, and column 3 shows the change over the period. It is important to note that these figures are not the actual levels of employment by occupation, but those implied by the shifting industrial mix of employment. They should therefore be interpreted as showing only those changes in employment by occupation strictly attributable to the shift in industrial structure. Column 4 lists the percentage change in employment by occupational group.

Column 5 of Table 3.3, labeled "National average growth effect," shows how much Montana employment in each occupation would have increased had it grown at the overall national rate of 7.34 percent. Column 6, labeled "Industry mix effect," shows the addition to (or reduction of) the national average growth effect

Table 3.3

MONTANA EMPLOYMENT BY OCCUPATION
INDUSTRY MIX AND SHARE ANALYSIS

OCCUPATION	1979	1984	Change	Percent change	National average growth effect	Industry mix effect	Competitive share effect
Managerial and Professional Speciality	95,330	98,073	2,743	2.9	6,997	1,399	-5,654
Executive, admin., and managerial	44,193	45,979	1,786	4.0	3,244	1,132	-2,590
Professional specialty	51,138	52,094	956	1.9	3,753	267	-3,064
Technical, Sales, and Admin. Support	114,401	118,999	4,598	4.0	8,397	2,455	-6,254
Technicians and related support	9,603	10,196	593	6.2	705	399	-510
Sales occupations	40,366	42,191	1,825	4.5	2,963	943	-2,081
Admin. support including clerical	64,432	66,612	2,180	3.4	4,729	1,113	-3,663
Service Occupations	56,703	60,873	4,170	7.4	4,162	3,739	-3,730
Protective service	5,465	5,479	14	0.3	401	-198	-189
Other service	51,238	55,394	4,156	8.1	3,761	3,936	-3,541
Precision Production, Craft, and Repair	43,467	42,901	-566	-1.3	3,190	-2,015	-1,741
Operators, Fabricators, and Laborers	49,560	47,917	-1,643	-3.3	3,638	-3,477	-1,804
Machine operators and assemblers	13,560	12,871	-688	-5.1	995	-1,130	-553
Transport and material moving	19,042	18,783	-259	-1.4	1,398	-1,370	-286
Handlers, cleaners, helpers, and laborers	16,958	16,262	-696	-4.1	1,245	-977	-964
Farming, Forestry, and Fishing	33,994	33,570	-424	-1.2	2,495	-3,399	480

Source: Table 3.1 and U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population, Vol. 1, Chapter D, Part 28, Montana; Table 224, "Occupation of Employed Persons by Industry: 1980."

attributable to Montana's mix of industries, assuming those industries had grown at the rates of their national counterparts.

Consider, for example, managerial and professional specialty occupations. Had employment in these occupations grown at the national rate of 7.34 percent, there would have been 6,997 more jobs. In addition, considering Montana's industrial mix and assuming that Montana's industries grew at the same pace as they did in the rest of the country, we could have expected another 1,399 managerial and professional specialty jobs, for a total of 8,396. In fact, calculated employment in these occupations grew by only 2,743. The difference between these two, -5,654, is given in column 7, labeled "Competitive share effect." It is important to note that these competitive share effects reflect the competitive performance of Montana's industries with respect to their national counterparts.

In general, Table 3.3 confirms that the shift in industrial structure has significantly changed occupational employment opportunities, with managerial, technical, sales, and service occupations growing, while production occupations of all types have contracted. It is interesting to note that this shift is mitigated in Montana by the relatively poor competitive performance of the service and trade sectors. With the exception of farm occupations, every occupational group lost employment due to the poor competitive performance of Montana's industries. But this is particularly true of the managerial, technical, sales, and service occupations (the first three major categories listed in Table 3.3). Employment in these occupations, taken together, rose 4.3 percent over the period; it would have risen 10.2 percent if Montana's industries had grown at the same rate as they did in the rest of the country. In contrast, the production occupations contracted by 2.1 percent and would have grown by only 0.3 percent in the absence of any negative competitive effects.

EFFECTS ON EARNINGS AND UNIONIZATION

Changes in the occupational structure of employment can be expected to affect average earnings. These effects are detailed in Table 3.4.

Table 3.4

EFFECTS OF SHIFTS IN OCCUPATIONAL STRUCTURE ON EARNINGS, 1979-1984

1. 1979 employment weighted average of 1979 mean earnings by occupation	$11,654
2. 1984 employment weighted average of 1979 mean earnings by occupation	$11,588
3. Mean earnings, expanding occupations	$10,496
4. Mean earnings, contracting occupations	$13,730

Source: Same as Table 3.3 and Census of Population, Vol. 1, Chapter D, Part 28, Montana; Table 222, "Occupation of the Civilian Labor Force by Earnings in 1979, Labor Force Status in 1979, Sex, Race, and Spanish Origin: 1980."

Line 1 of Table 3.4 shows the average earnings of members of the civilian labor force in 1979. This figure is an employment weighted average of 1979 earnings in 92 occupations, where the employment levels are those calculated from the values of employment by industry listed in Table 3.1. Line 2 shows implied average earnings for 1984. This is again a weighted average of

1979 occupational earnings, but differs from the figure for 1979 in the occupational employment weights, which are calculated on the basis of 1984 employment by industry, also listed in Table 3.1. The difference between lines 1 and 2 thus shows how the shift in industrial structure changed average earnings for all workers, supposing that earnings in each occupation remained unchanged at their 1979 values.

As expected, the shift in industrial structure tended to depress earnings, although not very much. Using the Montana occupational distribution, the shift in industrial structure reduced earnings from $11,654 to $11,588, or about 0.5 percent. The small size of this reduction is explained by the fact that although new employment in Montana was predominately in occupations with below average earnings, the overall occupational structure was quite stable over the period. This can be seen by comparing the first two columns of Table 3.3. Nevertheless, the new employment created by the shift in industrial structure was in occupations with substantially lower earnings than those in occupations that were shrinking.

Lines 3 and 4 of the table show weighted averages of 1979 occupational earnings in occupations that were, respectively, expanding and contracting over the period. The weight for each occupation is the amount of employment gained or lost, as the case may be. Earnings in expanding occupations were 23.6 percent below earnings in contracting occupations.

In addition to its impact on average earnings, the shift in industrial structure also affects the distribution of earnings opportunities. Tables 3.5 and 3.6 illustrate these effects for Montana.

Table 3.5

FREQUENCY DISTRIBUTION OF MEAN OCCUPATIONAL EARNINGS 1979 AND 1984

Earnings Range (Dollars)		Number of Workers in Occupations with Mean Earnings in Corresponding Range	
At Least	But Less Than	1979	1984
0	5,000	27,394	29,615
5,000	6,000	16,942	18,552
6,000	7,000	15,345	16,131
7,000	8,000	55,843	58,042
8,000	9,000	29,849	30,699
9,000	10,000	6,335	6,508
10,000	11,000	52,850	53,041
11,000	12,000	9,252	8,995
12,000	13,000	38,395	37,051
13,000	14,000	13,009	12,669
14,000	15,000	22,125	23,106
15,000	16,000	18,306	18,437
16,000	17,000	25,314	25,339
17,000	18,000	17,742	18,870
18,000	19,000	9,118	8,967
19,000	20,000	23,523	24,461
20,000		12,114	11,982

Source: Same as Table 3.4.

Table 3.5 lists for 1979 and 1984 the numbers of individuals in occupations with mean 1979 earnings in 17 $1,000 brackets. These numbers are based on employment in 92 occupations calculated from the 1979 and 1984 industrial employment values listed in Table 3.1. The differences in the distribution of earnings opportunities are attributable exclusively to changes in occupational structure, caused by a changed industrial mix.

Table 3.6 examines the shift in the distribution of earnings opportunities in detail. Column 3 of Table 3.6 shows the differences between the 1979 and 1984 distributions of earnings listed in Table 3.5. Column 4, labeled "Constant distribution," shows the increase in employment in each occupational earnings class that would have occurred had employment increased by the same percentage in all classes.

Table 3.6

CHANGE IN FREQUENCY DISTRIBUTION OF MEAN OCCUPATIONAL EARNINGS, 1979-84

Earnings Range (Dollars)		Change in Number of Workers in Occupations with Mean Earnings in Corresponding Range	
At Least	But Less Than	Actual	Constant Distribution
0	5,000	2,221	618
5,000	6,000	1,610	382
6,000	7,000	786	346
7,000	8,000	2,199	1,260
8,000	9,000	850	674
9,000	10,000	173	143
10,000	11,000	191	1,193
11,000	12,000	-297	209
12,000	13,000	-1,344	867
13,000	14,000	-340	294
14,000	15,000	981	499
15,000	16,000	132	413
16,000	17,000	26	571
17,000	18,000	1,037	400
18,000	19,000	-151	206
19,000	20,000	938	531
20,000		-134	273

Source: Same as Table 3.4.

The change in total employment is the same for both columns 3 and 4.

For occupations with 1979 earnings below $10,000, the growth of employment was substantially higher than that consistent with a constant distribution. Occupations with earnings in the middle range, from $10,000 to $14,000, grew at a rate below that required for a constant distribution. The remaining occupations, with earnings above $14,000, reveal little consistent pattern but, in the aggregate, grew slightly less rapidly than a constant distribution would require.

Taken together, the foregoing evidence indicates that the shift in Montana's industrial structure tends to erode seriously the quality of earning opportunities for Montanans. Although its effect on average earnings is not great, the shift from goods production to services and trade means that workers changing jobs are finding new ones that are considerably inferior to the ones they lost. In addition, occupations with roughly average earnings are losing ground to less well paid ones, while higher income occupations maintain their share of total employment. There is accordingly an increase in the inequality of earnings opportunities.

It should be born in mind, however, that this analysis attempts to isolate the impact of the changing industrial structure and that the effects described here are the results of that process alone. Other factors leading to higher and more equitably distributed earnings for Montanans--more education or improved mobility, for example--are not reflected in these results.

Another aspect of the shift in industrial structure is its impact on unionization of the labor force. Unfortunately, information on unionization by occupation and industry is available only for the nation as a whole, and not for Montana. Applying national unionization rates to Montana produces the figures listed in Table 3.7. Line 1 gives a weighted average of 1979 national occupational union representation rates, where the weights are 1979 Montana employment by occupation, calculated, as before, from the 1979 industrial employment values listed in Table 3.1. Representation rates refer to the percentage of workers represented by unions in collective bargaining, whether those workers are union members or not.

Table 3.7

EFFECTS OF SHIFTS IN OCCUPATIONAL STRUCTURE ON UNIONIZATION, 1979-1984

1. Estimated percentage of workers represented, 1979	19.6
2. Estimated percentage of workers belonging to unions, 1979	16.9
3. Estimated percentage of workers represented, 1984	19.4
4. Estimated percentage of workers belonging to unions, 1984	16.7
5. New workers represented as a percent of employment growth, 1979-84	9.4
6. New members as a percent of employment growth, 1979-84	6.8

Source: Same as Table 3.3 and U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, Vol. 33, No. 1, January 1986; Table 58, "Employed Wage and Salary Workers by Occupation, Industry, and Union Affiliation."

Line 3 is the same, except that the employment weights are from 1984. These figures show the rate of union representation Montana would have if each occupation was unionized to the same degree as in the nation in general. In comparison to actual Montana unionization rates, they are probably too low. The difference in lines 1 and 3, however, is attributable only to the shift in the industrial distribution of employment in Montana over the period.

Lines 2 and 4 are developed in the same way, except that they refer to union membership rates.

To the extent that national occupational unionization rates are applicable to Montana, it is apparent that the shift in industrial structure has reduced overall unionization although, as in the case of earnings, the effect is not dramatic.

Lines 5 and 6 of Table 3.7 express the change in union membership and in the number of workers represented as a percentage of the change in total employment over the period. These percentages--6.8 percent for membership and 9.4 percent for representation--are substantially lower than the corresponding average rates for the labor force as a whole.

DIFFERENTIALS IN MEN'S AND WOMEN'S EARNINGS

Depending on the definition of earnings used, women in Montana's labor force earn from 45 percent to 56 percent of what men do. These percentages are somewhat lower than those in the rest of the United States, and obviously suggest that women face severe disadvantages in the state's labor market.

The source of this earnings differential is not easy to pinpoint. The male and female labor forces differ from each other in a number of respects that potentially affect earnings and which do not always represent discrimination against women. Three of these differences in the male and female labor forces, and their effect on the earnings differential, are examined in Tables 3.8, 3.9, and 3.10.

Part 1 of Table 3.8 shows the differences in the educational attainments of men and women in Montana's experienced civilian

Table 3.8

MALE/FEMALE EARNINGS DIFFERENTIALS
EFFECTS OF EDUCATION

1. Educational attainment of members of the experienced civilian labor force working 40 or more weeks in 1979

Education completed:	Percent of all: Men	Percent of all: Women
Elementary		
0-7 years	1.9	1.0
8 years	5.9	2.9
High School		
1-3 years	9.2	8.3
4 years	42.0	46.9
College		
1-3 years	19.3	24.6
4 years	11.4	11.4
5 and 6 years	6.2	4.9
7 or more years	4.0	.1

2. Average earnings, members of the civilian labor force working 40 or more weeks in 1979

a. Men	$17,045
b. Women	$9,262
c. Women, corrected for educational attainment	$9,387
d. Women as percent of men	54.3
e. Women, corrected, as percent of men	55.1

Source: Census of Population, Vol. 1, Chapter D, Part 28, Montana; Table 237, "Income in 1979 of Persons 18 Years or Older by Years of School Completed, Age, Race, Spanish Origin, and Sex: 1980."

labor force. The figures are for 1979 and are from the 1980 United States Census of Population. They show that, compared to women, men have a greater tendency to have completed either very few or very many years of education. The figures refer to members of the labor force who worked 40 or more weeks in 1979; they do not reveal whether or not that work was full time.

Lines 2a and 2b of Table 3.8 show the average earnings of these workers in 1979; line 2d shows that women earned 54.3 percent of what men did. Line 2c shows what the average earnings of all women would have been if women at each level of educational attainment had earned what they did in 1979 but the relative number of women at each level had been the same as that of men. This figure is a weighted average of women's earnings at each level of educational attainment, where the weights are the relative numbers of men at each level.

Correcting for educational attainment in this way has only a very modest impact on the differential; women's earnings rise to 55.1 percent of men's. This result is to be expected given that, should women's educational attainment match that of men, some women would be much more highly educated while others would be much less so.

Table 3.9 provides a very similar analysis of the impact of the age distribution on the differential in men's and women's earnings. Part 1 shows that on average, women workers were younger than men, with a substantially larger percentage in the youngest age class, 18-24. Since in general earnings rise with age (at least up to about age 55), the relative youth of

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The earnings data employed in this analysis are median earnings by sex for 92 occupations of workers employed full time, year round, in 1979. In other respects, the analysis is identical to that applied to the distribution of educational attainment and age. For contrast, the analysis is conducted for Montana and for the nation as a whole.

Correcting for occupational distribution raises women's earnings from 56 percent to 58 percent of men's in Montana, and from 58 percent to 63 percent in the country as a whole. It would therefore help women very little to occupy "men's jobs" in the state. In general, this is because the jobs in which women were most underrepresented were also often ones in which they were very poorly paid.

In 1979, if Montana women had worked in occupations in the same relative numbers as Montana men, 32,179 women, approximately 75 percent of all full time women workers, would not have been in the occupations they actually were. Women would have had to increase their participation in 80 of the 92 occupations used in this analysis, but of the 32,179 changing occupations, 50 percent would have entered the eight occupations in which women were most underrepresented: farm operators, motor vehicle operators, automobile and other mechanics, general construction trades, farm wage occupations, material moving equipment operators, and general managers and administrators. In four of these occupations, farm operators and workers, motor vehicle operators, and automobile mechanics, women's earnings were less than the average for the women's labor force as a whole. This was true either because women suffered a particular earnings disadvantage with respect to men, or because neither men nor women did well in the occupation, or both, as in the case of farm operators and workers. Thirty-one percent of women changing jobs would move into these four occupations.

Because the educational, age, and occupational characteristics of women in Montana's labor force cannot explain their low earnings relative to men, it is likely that a significant share of the difference in earnings is attributable to market discrimination against women. But since other factors, such as variable employment histories or larger family responsibilities, typically reduce the earning capacity of women relative to men, the true extent of market discrimination is difficult to measure.

SHIFTS IN INDUSTRIAL STRUCTURE AND SEX DIFFERENTIALS

Because men and women typically worked in different occupations, the shift in the industrial structure that occurred between 1979 and 1984 affected men and women workers differently. These differences are detailed in Table 3.11.

Lines 1a and 1b are weighted averages of the percent change in employment in 92 occupations between 1979 and 1984, where the weights are the number of men and women, respectively, employed in each occupation in 1979. As before, these changes in occupational employment are derived from the shifts in industrial employment listed in Table 3.1 and are therefore attributable to that cause alone.

Table 3.11

EFFECTS OF SHIFTS IN OCCUPATIONAL STRUCTURE MALE/FEMALE EMPLOYMENT AND EARNINGS DIFFERENTIALS

1. Percent change in employment attributable to occupational growth or decline, 1979-1984	
a. Men	0.30
b. Women	4.80
2. Mean earnings	
a. Men, 1979	$14,878
b. Men, 1984	$14,915
c. Women, 1979	$6,744
d. Women, 1984	$6,727
e. Women as percent of men, 1979	45.3
f. Women as percent of men, 1984	45.1

Source: Same as Table 3.4.

The change in the state's industrial structure was much more favorable for the growth of women's occupations than men's. In fact, if men and women had retained their 1979 shares of employment in each occupation, total employment of women would have grown 4.8 percent while that of men would have grown at 0.3 percent.

At the same time, however, the difference in average earnings of men and women workers would have increased slightly.

Part 2 of Table 3.11 shows the impact of the shifting industrial structure on the mean earnings of all male and female members of the civilian labor force. Because this includes part time workers, these earnings, particularly for women, are lower than those listed previously. For the same reason, women's earnings as a percent of men's are also lower. These figures are calculated in the same way as those in Table 3.4; changes between 1979 and 1984 are thus attributable exclusively to changes in industrial structure. Over this period, the relatively rapid growth of service and trade employment implied, in turn, a shift in favor of low wage occupations. Since women worked in such occupations in disproportionate numbers, their average earnings tended to fall. The opposite was true of men and hence the difference between men's and women's earnings widened slightly.

CONCLUSION

Montana, like the rest of the nation, has undergone a broad shift in industrial structure. Goods production has stagnated or declined, while services and trade have grown. This shift has had significant and generally negative implications for employment and earning opportunities. This chapter examined those implications in detail. The industrial restructuring of Montana's economy means that new jobs being created pay substantially less than the jobs that are being lost. There is noticeable growth in the inequality of new employment opportunities and new jobs are much less unionized than existing ones. Finally, although industrial transformation has favored the growth of women's employment, it has not reduced the large difference between men's and women's earnings.

APPENDIX A

METHODOLOGY FOR DEFINING BASIC ACTIVITY IN MONTANA'S REGIONS

A. General

Generally, accumulated information about different Montana industries along with location quotients were used to define basic activity within economic sectors. Because of the nature of some industries, particular sectors were assumed to be basic in every region which amounted to assuming that they sold most of their product outside the region in question, or otherwise brought money into the region. These industries were:

1. coal mining;
2. oil and gas extraction;
3. metal mining;
4. heavy construction contractors;
5. all of manufacturing except food processing, printing and publishing, and stone/clay/glass products;
6. railroad and pipeline transportation;
7. hotels and other lodging places;
8. nonprofit membership organizations in counties where this category is dominated by tribal government;
9. federal and state government;
10. insurance carriers; and
11. agriculture.

B. Trucking

Trucking was assumed basic to a region if its state location quotient was greater than 1. For the Missoula region, the article entitled, "Missoula County's Trucking Industry," by Paul Polzin that appeared in the Winter 1985 issue of the *Montana Business Quarterly* was also used.

C. Mining of non-fuel, non-metallic minerals; food processing; stone, clay, and glass products

For these sectors the nature of the mix of activities within each sector was used to determine if the sector was basic for that particular region. For example, if the mineral mined was sand and gravel, then the sector was assumed to be non-basic because normally this mineral is not shipped out of a region. If the mineral was talc or phosphate rock, basic activity was assumed.

D. Electric, gas, and sanitary services

This sector was assumed to be basic for the Anaconda-Butte region, because of the home office of the Montana Power Company.

E. Non-basic industries with a basic component

To a limited extent, a basic component was estimated for industries that are primarily non-basic. This was done by applying the statewide percent of total employment for that industry to total employment for the region to crudely estimate the regional non-basic component. Regional basic employment was then estimated as the residual of total employment for the industry and regional non-basic employment. This procedure assumes that production practices and consumption patterns are the same in the region as the average for the state. This assumption is not necessarily valid. The sectors where this method was employed were:

1. printing and publishing;
2. communications;
3. wholesale trade;
4. retail trade;
5. business services;
6. health services;
7. recreation services; and
8. misc. services.

F. Banking

The Federal Reserve Bank in Helena was assumed to be basic to the Helena region.

G. Educational services

Carroll College was assumed to be basic to the Helena region.

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